

harman/kardon

AVR430

7 X 65W 7.1 CHANNEL A/V RECEIVER

AVR630

7 X 75W 7.1 CHANNEL A/V RECEIVER

SERVICE MANUAL



CONTENTS

| | | | |
|----------------------------------|----|-----------------------------------|-----|
| ESD WARNING..... | 2 | BLOCK DIAGRAM..... | 28 |
| LEAKAGE TESTING..... | 3 | EXPLODED VIEW..... | 29 |
| AVR430 BASIC SPECIFICATIONS..... | 4 | EXPLODED VIEW PARTS LIST..... | 30 |
| AVR630 BASIC SPECIFICATIONS..... | 5 | AVR630 MECHANICAL PARTS LIST..... | 32 |
| FRONT PANEL CONTROLS..... | 6 | AVR630 ELECTRICAL PARTS LIST..... | 34 |
| REAR PANEL CONNECTIONS..... | 9 | AVR430 MECHANICAL PARTS LIST..... | 54 |
| REMOTE CONTROL FUNCTIONS..... | 12 | AVR430 ELECTRICAL PARTS LIST..... | 56 |
| TROUBLESHOOTING GUIDE..... | 16 | SEMICONDUCTOR PINOUTS..... | 75 |
| PROCESSOR RESET..... | 16 | PCB DRAWINGS..... | 103 |
| SERVICE PROCEDURE..... | 17 | SCHEMATICS..... | 114 |
| BULLETIN HK2004-04..... | 20 | WIRING DIAGRAM..... | 125 |
| TECH TIP HKTT2004-03..... | 23 | PACKING..... | 126 |
| TECH TIP HKTT2003-01..... | 27 | | |

harman/kardon, Inc.

250 Crossways Park Dr.

Woodbury, New York 11797

Rev2 10/2005

ELECTROSTATICALLY SENSITIVE (ES) DEVICES

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field effect transistors and semiconductor "chip" components.

The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge build-up or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static" can generate electrical charges sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical change sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material.)
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

CAUTION : Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES devices.

PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing.

Components identified with the IEC symbol  in the parts list are special significance to safety. When replacing a component identified with , use only the replacement parts designated, or parts with the same ratings or resistance, wattage, or voltage that are designated in the parts list in this manual. Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

LEAKAGE TEST(FOR SERVICE ENGINEERS IN THE U.S.A)

Before returning the unit to the user, perform the following safety checks :

1. Inspect all lead dress to make certain that

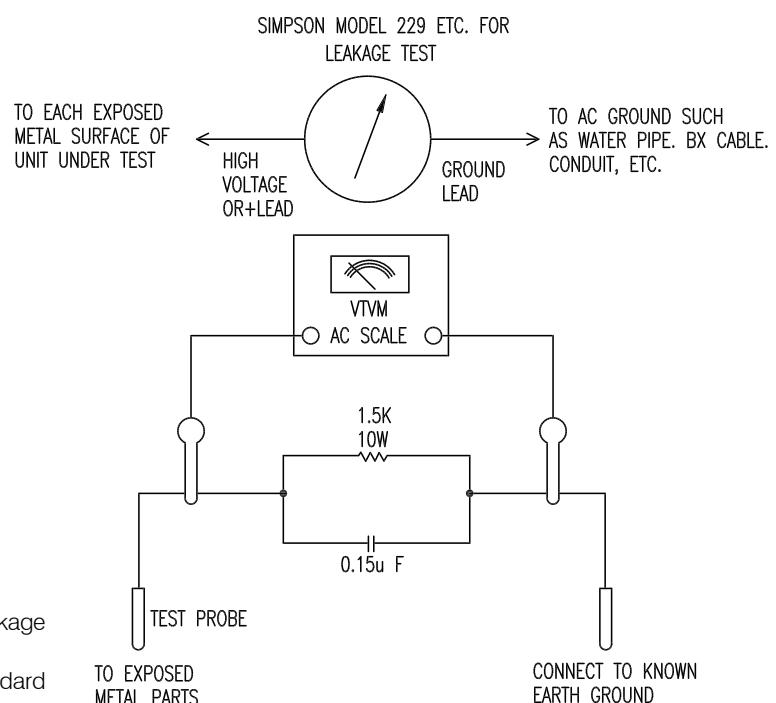
leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the unit.

2. Be sure that any protective devices such as nonmetallic control knobs, insulating fish-papers, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacity networks, mechanical insulators, etc. Which were removed for the servicing are properly re-installed.

3. Be sure that no shock hazard exists ; check for leakage

current using Simpson Model 229 Leakage Tester, standard equipment item No. 21641, RCA Model WT540A or use alternate method as follows : Plug the power cord directly into a 120 volt AC receptacle (do not use an Isolation Transformer for this test). Using two clip leads, connect a

1500 ohms, 10watt Resistor paralleled by a 0.15uF capacitor, in series with all exposed metal cabinet parts and a known earth ground, such as a water pipe or conduit. Use a VTVM or VOM with 1000 ohms per volt, or higher sensitivity to measure the AC voltage drop across the resistor. (See diagram) Move the resistor connection to each exposed metal part having a return path to the chassis (antenna, metal, cabinet, screw heads, knobs and control shafts, escutcheon, etc.) and measure the AC voltage drop across the resistor. (This test should be performed with the 0.35 volt RMS or more is excessive and indicates a potential shock hazard which must be corrected before returning the unit to the owner.



AVR 430 TECHNICAL SPECIFICATIONS

Audio Section

Stereo Mode
 Continuous Average Power (FTC)
 80 Watts per channel, 20Hz–20kHz,
 @ <0.07% THD, both channels driven into 8 ohms

Seven-Channel Surround Modes
 Power per Individual Channel

Front L&R channels:
 65 Watts per channel
 @ <0.07% THD, 20Hz–20kHz into 8 ohms

Center channel:
 65 Watts @ <0.07% THD, 20Hz–20kHz into 8 ohms

Surround (L & R Side, L & R back) channels:
 65 Watts per channel
 @ <0.07% THD, 20Hz–20kHz into 8 ohms

Input Sensitivity/Impedance
 Linear (High-Level) 200mV/47k ohms

Signal-to-Noise Ratio (IHF-A) 95dB

Surround System Adjacent Channel Separation

Pro Logic I/II 40dB
 Dolby Digital (AC-3) 55dB
 DTS 55dB

Frequency Response
 @ 1W (+0dB, -3dB) 10Hz – 130kHz

High Instantaneous Current Capability (HCC)
 ±40 Amps

Transient Intermodulation Distortion (TIM)
 Unmeasurable

Slew Rate 40V/μsec

FM Tuner Section

Frequency Range 87.5–108.0MHz
 Usable Sensitivity IHF 1.3μV/13.2dBf
 Signal-to-Noise Ratio Mono/Stereo 70/68dB
 Distortion Mono/Stereo 0.2/0.3%
 Stereo Separation 40dB @ 1kHz
 Selectivity ±400kHz, 70dB
 Image Rejection 80dB
 IF Rejection 90dB

AM Tuner Section

Frequency Range 520–1720kHz
 Signal-to-Noise Ratio 45dB
 Usable Sensitivity Loop 500μV
 Distortion 1kHz, 50% Mod 0.8%
 Selectivity ±10kHz, 30dB

Video Section

Television Format NTSC
 Input Level/Impedance 1Vp-p/75 ohms
 Output Level/Impedance 1Vp-p/75 ohms
 Video Frequency Response (Composite and S-Video) 10Hz–8MHz (-3dB)
 Video Frequency Response (Component Video) 10Hz–50MHz (-3dB)

General

| | | |
|-------------------|---|---------------------|
| Power Requirement | AC 120V/60Hz | |
| Power Consumption | 59W idle, 940W at rated power output (7 channels driven) | |
| Dimensions | Product | Shipping |
| Width | 17.3 inches (440mm) | 20.1 inches (510mm) |
| Height | 6.5 inches (165mm) | 10 inches (254mm) |
| Depth | 17.1 inches (435mm) | 22.2 inches (565mm) |
| Weight | 39 lb (17.7kg) | 45 lb (20.4kg) |

Depth measurement includes knobs, buttons and terminal connections.
 Height measurement includes feet and chassis.

All features and specifications are subject to change without notice.

Harman Kardon, Power for the Digital Revolution and Logic 7 are registered trademarks of Harman International Industries, Incorporated.

 **EzSet*** is a trademark of Harman International Industries, Incorporated (patent no. 5,386,478).

*Manufactured under license from Dolby Laboratories. "Dolby," "Pro Logic" and the Double-D symbol are trademarks of Dolby Laboratories.

DTS, DTS Surround, DTS-ES and DTS Neo:6 are registered trademarks of Digital Theater Systems, Inc.

VMAX is a registered trademark of Harman International Industries, Incorporated, and is an implementation of Cooper Bauck Transaural Stereo under patent license.

A-BUS and A-BUS/Ready are registered trademarks of Leisure Tech Electronics Pty Ltd. Australia.

TiVo is a registered trademark of TiVo, Inc.

Replay TV is a registered trademark of SONICblue, Inc.

AVR 630 TECHNICAL SPECIFICATIONS

Audio Section

| | |
|---|--|
| Stereo Mode | |
| Continuous Average Power (FTC) | |
| 90 Watts per channel, 20Hz–20kHz, @ <0.07% THD, both channels driven into 8 ohms | |
| Seven-Channel Surround Modes | |
| Power per Individual Channel | |

| | |
|---|--|
| Front L&R channels: | |
| 75 Watts per channel | |
| @ <0.07% THD, 20Hz–20kHz into 8 ohms | |
| Center channel: | |
| 75 Watts @ <0.07% THD, 20Hz–20kHz into 8 ohms | |
| Surround (L & R Side, L & R back) channels: | |
| 75 Watts per channel | |
| @ <0.07% THD, 20Hz–20kHz into 8 ohms | |

| | |
|-----------------------------|----------------|
| Input Sensitivity/Impedance | |
| Linear (High-Level) | 200mV/47k ohms |

| | |
|-------------------------------|------|
| Signal-to-Noise Ratio (IHF-A) | 95dB |
|-------------------------------|------|

Surround System Adjacent Channel Separation

| | |
|----------------------|------|
| Pro Logic I/II | 40dB |
| Dolby Digital (AC-3) | 55dB |
| DTS | 55dB |

| | |
|--------------------|---------------|
| Frequency Response | |
| @ 1W (+0dB, -3dB) | 10Hz – 130kHz |

| | |
|---|----------|
| High Instantaneous Current Capability (HCC) | ±50 Amps |
|---|----------|

| | |
|--|--------------|
| Transient Intermodulation Distortion (TIM) | Unmeasurable |
| Slew Rate | 40V/μsec |

FM Tuner Section

| | |
|-----------------------|----------------------|
| Frequency Range | 87.5–108.0MHz |
| Usable Sensitivity | IHF 1.3μV/13.2dBf |
| Signal-to-Noise Ratio | Mono/Stereo 70/68dB |
| Distortion | Mono/Stereo 0.2/0.3% |
| Stereo Separation | 40dB @ 1kHz |
| Selectivity | ±400kHz, 70dB |
| Image Rejection | 80dB |
| IF Rejection | 90dB |

AM Tuner Section

| | |
|-----------------------|--------------------|
| Frequency Range | 520–1720 kHz |
| Signal-to-Noise Ratio | 45dB |
| Usable Sensitivity | Loop 500μV |
| Distortion | 1kHz, 50% Mod 0.8% |
| Selectivity | ±10kHz, 30dB |

Video Section

| | |
|--|-------------------|
| Television Format | NTSC |
| Input Level/Impedance | 1Vp-p/75 ohms |
| Output Level/Impedance | 1Vp-p/75 ohms |
| Video Frequency Response (Composite and S-Video) | 10Hz–8MHz (-3dB) |
| Video Frequency Response (Component Video) | 10Hz–50MHz (-3dB) |

General

| | |
|-------------------|--|
| Power Requirement | AC 120V/60Hz |
| Power Consumption | 59W idle, 1000W at rated power output (7 channels driven) |
| Dimensions | |
| Width | Product 17.3 inches (440mm) |
| Height | Shipping 20.1 inches (510mm) |
| Depth | 6.5 inches (165mm) 10 inches (254mm) |
| Weight | 17.1 inches (435mm) 22.2 inches (565mm) |
| | 41 lb (18.6kg) 47 lb (21.4kg) |

Depth measurement includes knobs, buttons and terminal connections.

Height measurement includes feet and chassis.

All features and specifications are subject to change without notice.

Harman Kardon, Power for the Digital Revolution and Logic 7 are registered trademarks of Harman International Industries, Incorporated.

EZSET™ is a trademark of Harman International Industries, Incorporated (patent no. 5,386,478). *Manufactured under license from Dolby Laboratories. "Dolby," "Pro Logic" and the Double-D symbol are trademarks of Dolby Laboratories.

DTS, DTS Surround, DTS-ES and DTS Neo:6 are registered trademarks of Digital Theater Systems, Inc.

VMAX is a registered trademark of Harman International Industries, Incorporated, and is an implementation of Cooper Bauck Transaural Stereo under patent license.

HDCD system manufactured under license from Pacific Microsonics, Inc. This product is covered by one or more of the following: in the USA: 5,479,168; 5,638,074; 5,640,161; 5,808,574; 5,838,274; 5,854,600; 5,864,311; 5,872,531; and in Australia: 669114. Other patents pending.

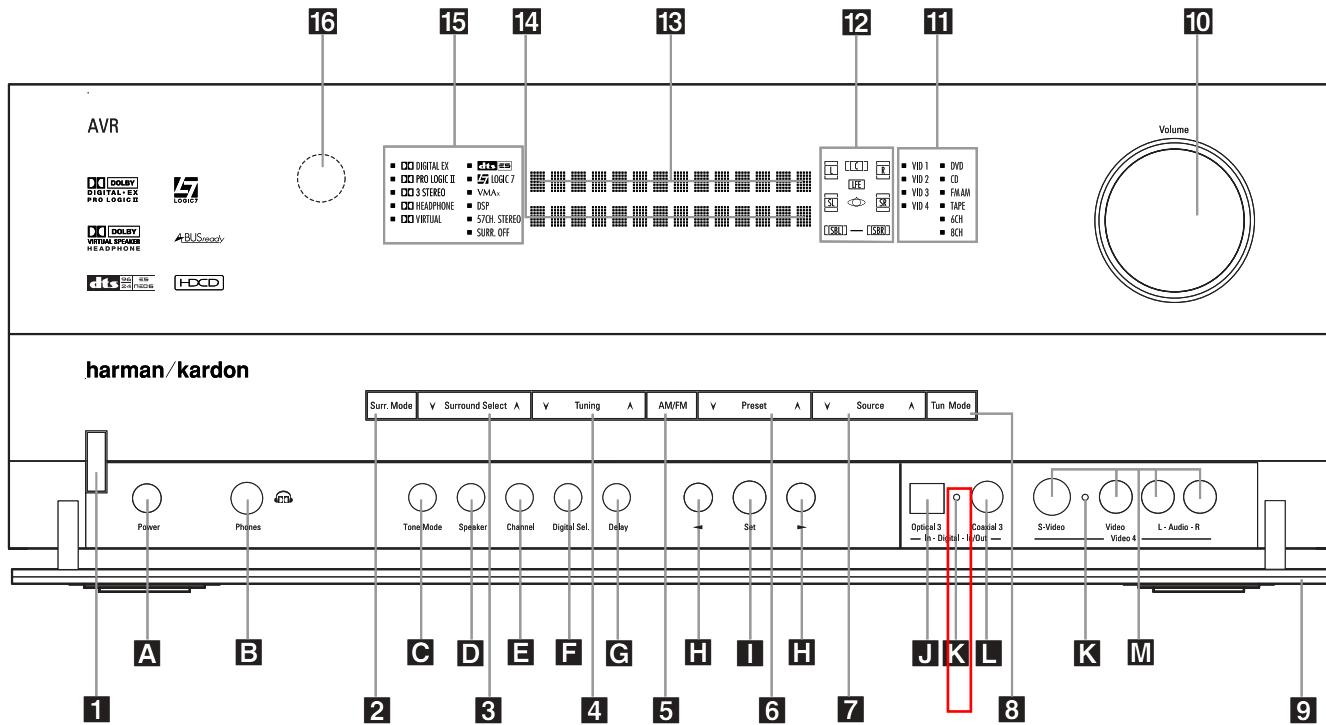
A-BUS and A-BUS Ready are registered trademarks of Leisure Tech Electronics Pty Ltd Australia.

TiVo is a registered trademark of TiVo, Inc.

Replay TV is a registered trademark of SONICblue, Inc.

= AVR630 only feature

FRONT - PANEL CONTROLS



NOTE: To make it easier to follow the instructions that refer to this illustration, a larger copy may be downloaded from the Product Support section for this product at www.harmankardon.com.

The following controls and indicators are available on the AVR front panel:

- | | |
|---------------------------------------|--|
| 1 Standby/On Switch | 7 Input Source Selector |
| 2 Surround Mode Group Selector | 8 Tuning Mode Selector |
| 3 Surround Mode Selector | 9 Front Panel Control Door |
| 4 Tuning Selector | 10 Volume Control |
| 5 Tuner Band Selector | 11 Input Indicators |
| 6 Preset Station Selector | 12 Speaker/Channel Input Indicators |

The following controls and jacks are located behind the front-panel door. To open the door, place the edge of a finger on the left or right edge of the panel and gently swing the door down towards you.

- | | |
|----------------------------------|--|
| A Main Power Switch | F Digital Input Selector |
| B Headphone Jack | G Delay Adjust Selector |
| C Tone Mode Button | H \blacktriangleleft / \triangleright Buttons |
| D Speaker Selector Button | I Set Button |
| E Channel Adjust Selector | J Optical 3 Digital Input |

1 **Standby/On Switch:** When the **Main Power Switch** **A** is "ON," press this button to turn on the AVR ; press it again to turn the unit off. Note that the illumination surrounding the switch will turn blue when the unit is on.

2 **Surround Mode Group Selector:** Press this button to select the top-level group of surround modes. Each press of the button will select one of the surround mode categories. Once the button is pressed so

- | |
|------------------------------------|
| 13 Upper Display Line |
| 14 Lower Display Line |
| 15 Surround Mode Indicators |
| 16 Remote Sensor Window |

- | |
|---|
| K Input/Output Status Indicators |
| L Coaxial 3 Digital Jack |
| M Video 4 Audio/Video Jacks |

that the name of the desired surround mode category appears in the on-screen display and in the **Lower Display Line** **14**, press the **Surround Mode Selector** **3** to cycle through the individual modes available. For example, press this button to select Dolby modes, and then press the **Surround Mode Selector** **3** to choose from the various mode options.

3 **Surround Mode Selector:** Press this button to select from among the available surround mode

options for the surround mode category selected. The specific modes will vary based on the number of speakers available, the surround mode category and whether the input source is digital or analog. For example, press the **Surround Mode Group Selector** **2** to select a category such as Dolby or Logic 7, and then press this button to see the specific mode choices that are available.

FRONT - PANEL CONTROLS

4 Tuning Selector: Press the left side of the button to tune lower-frequency stations and the right side of the button to tune higher-frequency stations. When the tuner is in the **MANUAL / MONO** mode, each tap of the Selector will increase or decrease the frequency by one increment. When the tuner receives a strong-enough signal for adequate reception, **MANUAL TUNED** will appear in the **Lower Display Line 14** and in the on-screen display. When the tuner is in the **AUTO / STEREO** mode, press the button once, and the tuner will scan for a station with acceptable signal strength. When the next higher or lower frequency station with a strong-enough signal is tuned, the frequency scan will stop and the **Lower Display Line 14** and the on-screen display will indicate **AUTO TUNED**. When an FM Stereo station is tuned, the display will read **AUTO ST TUNED**.

5 Tuner Band Selector: Pressing this button will automatically switch the AVR to the Tuner mode. Pressing it again will switch between the AM and FM frequency bands.

6 Preset Station Selector: Press this button to scroll up or down through the list of stations that have been entered into the preset memory.

7 Input Source Selector: Press this button to change the input by scrolling up or down through the list of input sources.

8 Tuning Mode Selector: Press this button to select Auto or Manual tuning. When the button is pressed so that **AUTO / STEREO** appears in the **Upper Display Line 13**, the tuner will search for the next station with an acceptable signal when the **Tuning Selector 4 23 E** is pressed. When the button is pressed so that **MANUAL / MONO** appears in the **Upper Display Line 13**, each press of the **Tuning Selector 4 23 E** will increase the frequency.

This button may also be used to switch between Stereo and Mono modes for FM radio reception. When weak

reception is encountered, select the Manual/Mono tuning mode. Press and hold again to switch back to Stereo mode. (

9 Front-Panel Control Door: To open the door so that the front-panel jacks and controls behind this door may be accessed, gently pull the door down and towards you using either upper corner of the door.

10 Volume Control: Turn this knob clockwise to increase the volume, counterclockwise to decrease the volume. If the AVR is muted, adjusting the volume control will automatically release the unit from the silenced condition.

11 Input Indicators: One of these indicators will light to identify the currently selected input. Note that the entire list will light briefly each time the unit is turned on as a test.

12 Speaker/Channel Input Indicators: These indicators are multipurpose, indicating both the speaker type selected for each channel and the incoming data-signal configuration. The left, center, right, right surround and left surround speaker indicators are composed of three boxes, while the subwoofer is a single box. The center box lights when a "small" speaker is selected, and the two outer boxes light when "large" speakers are selected. When none of the boxes are lit for the center, surround or subwoofer channels, no speaker has been assigned that position.

The letters inside each box displays the active input channels. For standard analog inputs, only the L and R will light, indicating a stereo input. For a digital source, the indicators will light to display the channels being received at the digital input. When the letters flash, the digital input has been interrupted.

13 Upper Display Line: Depending on the unit's status, a variety of messages will appear here. In normal operation, this line will show the current input source and identify whether an analog or digital input is in use. When the tuner is selected as the input, this line will identify the station as AM or FM and show the frequency and preset number, if any.

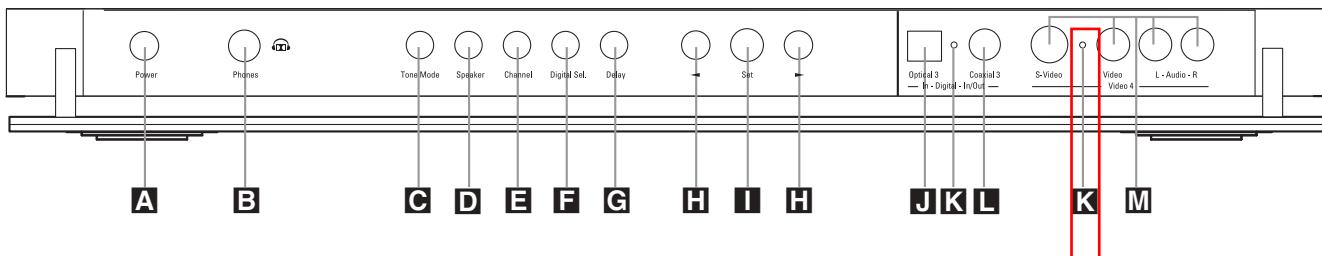
14 Lower Display Line: Depending on the unit's status, a variety of messages will appear here. In normal operation, the current surround mode will appear on this line.

15 Surround Mode Indicators: One of these indicators will light to show the surround mode in use. Depending on the specific combination of input sources and surround mode selected, more than one indicator may light.

16 Remote Sensor Window: The sensor behind this window receives infrared signals from the remote control. Aim the remote at this area and do not block or cover it unless an external remote sensor is installed.

= AVR630 only feature

FRONT - PANEL CONTROLS



The following controls and jacks are located behind the front-panel door. To open the door, place the edge of a finger on the left or right edge of the panel and gently swing the door down towards you.

A Main Power Switch: Press this switch to apply power to the AVR. When the switch is pressed in, the unit is placed in a Standby mode, as indicated by the amber illumination surrounding the **Standby/On Switch** **I**. This button MUST be pressed in to operate the unit. To turn the unit off and prevent the use of the remote control, this switch should be pressed until it pops out from the front panel so that the word "OFF" may be read at the top of the switch.

NOTE: This switch is normally left in the "ON" position.

B Headphone Jack: This jack may be used to listen to the AVR's output through a pair of headphones. Be certain that the headphones have a standard 1/4" stereo phone plug, or that you use an adapter, as needed, to convert the plug on your headphones to the 1/4" jack used on the AVR. When the headphone jack is in use, the main room speakers will automatically be turned off and the unit will output a standard stereo signal. You may also use one of the Dolby Headphone modes for an enhanced listening experience.

C Tone Mode Button: This button controls the tone mode settings, enabling adjustment of the bass and treble boost/cut. You may also use it to take the tone controls out of the signal path completely for "flat" response. The first press of the button displays a **TONE MODE** message in the **Lower Display Line** **14** and in the on-screen display. To take the controls out of the signal path, press either of the **◀/▶ Buttons** **H** until the display reads **TONE OUT**. To change the bass or treble settings, press the button again until the desired option appears in the **Lower Display Line** **14** and in the on-screen display and then press either of the **◀/▶ Buttons** **H** to enter the desired boost or cut setting.

D Speaker Selector Button: Press this button to begin the process of configuring the AVR for the type of speakers it is being used with.

E Channel Adjust Selector: Press the button to begin the process of adjusting the channel level outputs using the source currently playing through your AVR.

F Digital Input Selector: Press this button to begin the process of selecting a digital source for use with the currently selected input. Once the button has been pressed, use the **◀/▶ Buttons** **H** to choose the desired input and then press the **Set Button** **I** to enter the setting into the unit's memory. See page 30 for more information on digital audio.

G Delay Adjust Selector: Press this button to begin the process of adjusting the delay settings for Dolby surround modes.

H ▲/▼ Buttons: When making system configuration changes using the front-panel controls, press these buttons to scroll through the available choices for the option being adjusted.

I Set Button: When making system configuration changes using the front-panel controls, press this button to enter a setting into the unit's memory.

J Optical 3 Digital Input: Connect the optical digital output of an audio or video product to this jack.

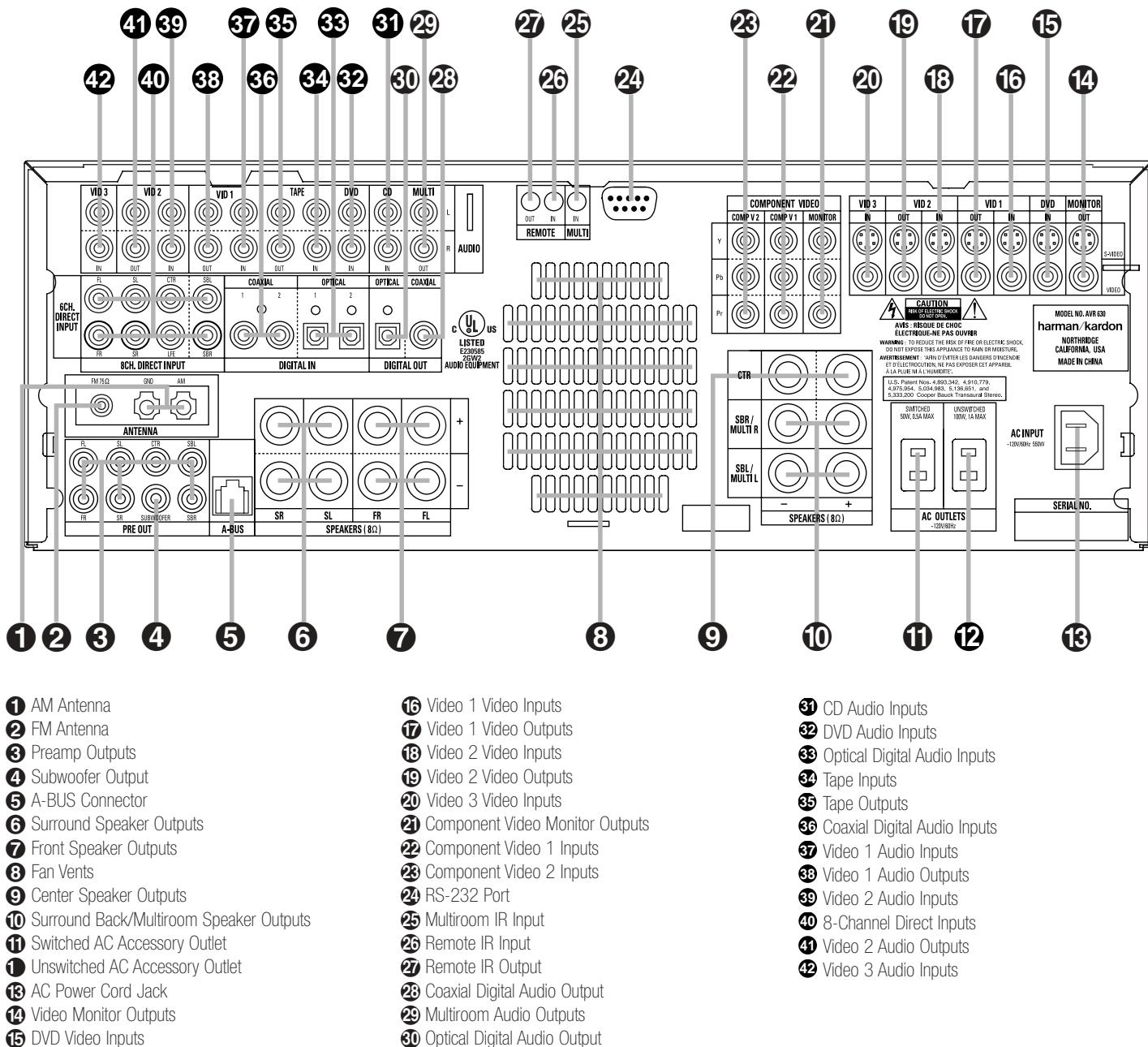
K Input/Output Status Indicators: These LED indicators will normally light green to show that the front-panel **Coaxial 3 Digital Jack** **L** and **Video 4 Input/Output Jacks** **M** are operating as inputs. When these jacks are configured for use as an output, the

appropriate indicator will turn red to show that the jack may be used as an output for recording.

L Coaxial 3 Digital Jack: Connect the coaxial digital input or output for a digital audio product such as a portable audio player or video game to this jack. The jack is normally an input, but may be switched to an output for recording using the menu system.

M Video 4 Input/Output Jacks: These audio/video jacks may be used as either an input or output for temporary connection to video games or portable audio/video products such as camcorders and portable audio players.

REAR-PANEL CONNECTIONS



NOTE: To make it easier to follow the instructions that refer to this illustration, a larger copy may be downloaded from the Product Support section for this product at www.harmankardon.com.

NOTE: To assist in making the correct connections for multichannel input, output and speaker connections, all connection jacks and terminals are color-coded in conformance with the CEA standards as follows:

| | |
|--------------|-------|
| Front Left: | White |
| Front Right: | Red |
| Center: | Green |

| | |
|----------------------|--------|
| Surround Left: | Blue |
| Surround Right: | Gray |
| Surround Back Left: | Brown |
| Surround Back Right: | Tan |
| Subwoofer: | Purple |
| Digital Audio: | Orange |
| Composite Video: | Yellow |

| | |
|-----------------------|-------|
| Component Video "Y": | Green |
| Component Video "Pr": | Red |
| Component Video "Pb": | Blue |

REAR-PANEL CONNECTIONS

1 AM Antenna: Connect the AM loop antenna supplied with the receiver to these terminals. If an external AM antenna is used, make connections to the **AM** and **GND** terminals in accordance with the instructions supplied with the antenna.

2 FM Antenna: Connect the supplied indoor or an optional external FM antenna to this terminal.

3 Preamp Outputs: Connect these jacks to an optional, external power amplifier for applications where higher power is desired.

4 Subwoofer Output: Connect this jack to the line-level input of a powered subwoofer. If an external subwoofer amplifier is used, connect this jack to the subwoofer amplifier input.

5 A-BUS Connector: Connect this jack to an optional A-BUS®-certified remote room keypad or amplifier to extend the multiroom capabilities of your AVR 630.

6 Surround Speaker Outputs: Connect these outputs to the matching + and – terminals on your surround channel speakers. In conformance with the CEA color-code specification, the blue terminal is the positive, or “+” terminal that should be connected to the red (+) terminal on the Surround Left speaker with older color-coding, while the gray terminal should be connected to the red (+) terminal on the Surround Right speaker with the older color-coding. Connect the black (–) terminal on the AVR to the matching black negative (–) terminals for each surround speaker.

7 Front Speaker Outputs: Connect these outputs to the matching + or – terminals on your left and right speakers. When making speaker connections always make certain to maintain correct polarity by connecting the color-coded (white for front left and red for front right) (+) terminals on the AVR to the red (+) terminals on the speakers and the black (–) terminals on the AVR to the black (–) terminals on the speakers.

8 Fan Vents: These ventilation holes are the output of the AVR's airflow system. To ensure proper operation of the unit and to avoid possible damage to delicate surfaces, make certain that these holes are not blocked and that there is at least three inches of open space between the vent holes and any wooden or fabric surface. It is normal for the fan to remain off at most normal volume levels. An automatic temperature sensor turns the fan on only when it is needed.

9 Center Speaker Outputs: Connect these outputs to the matching + and – terminals on your center channel speaker. In conformance with the CEA color-code specification, the green terminal is the positive, or “+” terminal that should be connected to the red (+) terminal on speakers with the older color-coding. Connect the black (–) terminal on the AVR to the black negative (–) terminal on your speaker.

10 Surround Back/Multiroom Speaker Outputs: These speaker terminals are normally used to power the surround back left/surround back right speakers in a 7.1 channel system. However, they may also be used to power the speakers in a second zone, which will receive the output selected for a multiroom system. To change the output fed to these terminals from the default of the Surround Back speakers to the Multiroom Output, you must change a setting in the Advanced Menu of the OSD system.

In normal surround system use, the brown and black terminals are the surround back left channel positive (+) and negative (–) connections and the tan and black terminals are the surround back right positive (+) and negative (–) terminals. For multiroom use, connect the brown and black SBL terminals to the red and black connections on the left remote zone speaker and connect the tan and black SBR terminals to the red and black terminals on the right remote zone speaker.

11 Switched AC Accessory Outlet: These outlets may be used to power any device you wish to have turned on when the AVR is turned on with the Standby/On Switch **1**.

12 Unswitched AC Accessory Outlet: This outlet may be used to power any AC device. The power will remain on at this outlet regardless of whether the AVR is on or off.

NOTE: The total power consumption of all devices connected to the accessory outlets should not exceed 100 watts.

13 AC Power Cord Jack: Connect the AC power cord to this jack when the installation is complete. To ensure safe operation, use only the power cord supplied with the unit. If a replacement is required, it must be of the same type and capacity.

14 Video Monitor Outputs: Connect these jacks to the composite or S-Video input of a TV monitor or video projector to view the on-screen menus and the output of any standard video source selected by the receiver's video switcher.

15 DVD Video Inputs: Connect the composite or S-Video outputs of a DVD player or other video source to these jacks.

16 Video 1 Video Inputs: Connect the composite or S-Video PLAY/OUT jacks of a VCR or other video source to these jacks.

17 Video 1 Video Outputs: Connect the composite or S-Video REC/IN jacks of a VCR or other video recording device such as a DVD recorder or PVR to these jacks.

18 Video 2 Video Inputs: Connect the composite or S-Video PLAY/OUT jacks of a VCR or other video source to these jacks.

19 Video 2 Video Outputs: Connect the composite or S-Video REC/IN jacks of a VCR or other video recording device such as a DVD recorder or PVR to these jacks.

20 Video 3 Video Inputs: Connect the composite or S-Video PLAY/OUT jacks of a VCR or other video source to these jacks.

21 Component Video Monitor Outputs: Connect these outputs to the component video inputs of a video projector or monitor. When a source connected to one of the **Component Video Inputs 22/23** is selected the signal will be sent to these jacks.

22 Component Video 1 Inputs: These inputs may be used with any source device equipped with analog Y/Pr/Pb or RGB component video outputs. The factory default is for these jacks to be linked to the DVD input, but you may change the setting at any time through the **IN/OUT SETUP** menu.

23 Component Video 2 Inputs: These inputs may be used with any video source device equipped with analog Y/Pr/Pb or RGB component video outputs. The factory default is for these jacks to be linked to the Video 2 input, but you may change the setting at any time through the **IN/OUT SETUP** menu.

24 RS-232 Port: This jack may be used to control the AVR over a bi-directional RS-232 serial control link to a compatible computer or programmable remote control system. Due to the complexity of programming RS-232 commands we strongly recommend that connections to this port for control purposes be made by a trained and qualified technician. This jack may also link to a compatible computer to upgrade the software and operating system of the AVR when appropriate upgrades are available.

25 Multiroom IR Input: Connect the output of an IR sensor in a remote room to this jack to operate the AVR's multiroom control system.

REAR - PANEL CONNECTIONS

26 Remote IR Input: If the AVR's front-panel IR sensor is blocked due to cabinet doors or other obstructions, an external IR sensor may be used. Connect the output of the sensor to this jack.

27 Remote IR Output: This connection permits the IR sensor in the receiver to serve other remote controlled devices. Connect this jack to the "IR IN" jack on Harman Kardon (or other compatible) equipment.

28 Coaxial Digital Audio Output: Connect this jack to the coaxial digital input of a CD-R/RW, MiniDisc or other compatible digital recorder.

29 Multiroom Audio Outputs: Connect these jacks to the optional external audio power amplifier and video distribution system that delivers the source selected for multizone distribution.

30 Optical Digital Audio Output: Connect this jack to the optical digital input connector on a CD-R/RW, MiniDisc or other compatible digital recorder.

31 CD Audio Inputs: Connect these jacks to the left/right analog audio output of a compact disc player or CD changer or other audio source.

32 DVD Audio Inputs: Connect the left/right analog outputs of a DVD player or other audio source to these jacks.

33 Optical Digital Audio Inputs: Connect the optical digital output from a DVD player, HDTV receiver, the S/P-DIF output of a compatible computer sound card playing MP3 files or streams, LD player or CD player to these jacks. The signal may be a Dolby Digital signal, a DTS signal or a standard PCM digital source.

34 Tape Inputs: Connect these jacks to the Play/Out jacks of an audio recorder.

35 Tape Outputs: Connect these jacks to the Record/Input jacks of an audio recorder.

36 Coaxial Digital Audio Inputs: Connect the coax digital output from a DVD player, HDTV receiver, the S/P-DIF output of a compatible computer sound card playing MP3 files or streams, LD player or CD player to these jacks. The signal may be a Dolby Digital signal, DTS signal or a standard PCM digital source. Do not connect the RF digital output of an LD player to these jacks.

37 Video 1 Audio Inputs: Connect the left/right PLAY/OUT audio output jacks on a VCR or other video source to these jacks.

38 Video 1 Audio Outputs: Connect the left/right REC/IN audio input jacks on a VCR or other video source to these jacks.

39 Video 2 Audio Inputs: Connect the left/right PLAY/OUT audio output jacks on a VCR or other video source to these jacks.

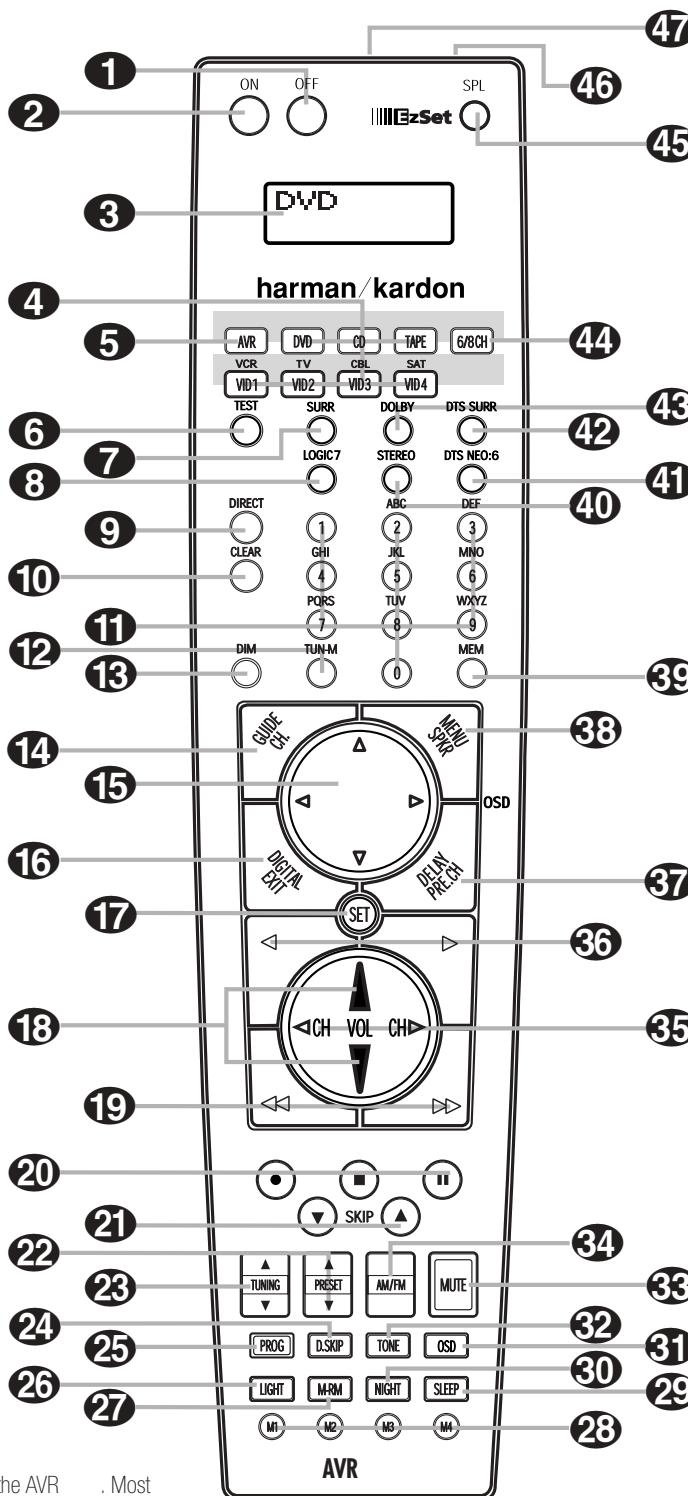
40 8-Channel Direct Inputs: These jacks are used for connection to source devices such as DVD-Audio or SACD players with discrete analog outputs. Depending on the source device in use, all eight jacks may be used, though in many cases only connections to the front left/right, center, surround left/right and LFE (subwoofer input) jacks will be used for standard 5.1 audio signals.

41 Video 2 Audio Outputs: Connect the left/right REC/IN audio input jacks on a VCR or other video source to these jacks.

42 Video 3 Audio Inputs: Connect the left/right PLAY/OUT audio output jacks on a VCR, PVR, cable set-top, satellite receiver, HDTV receiver or other video source to these jacks.

MAIN REMOTE CONTROL FUNCTIONS

- 1 Power Off Button
- 2 Power On Button
- 3 LCD Information Display
- 4 Input Selectors
- 5 AVR Selector
- 6 Test Button
- 7 DSP Surround Mode Selector
- 8 Logic 7 Mode Select Button
- 9 Direct Button
- 10 Clear Button
- 11 Numeric Keys
- 12 Tuning Mode Button
- 13 Dim Button
- 14 Channel Select Button
- 15 Navigation Button
- 16 Digital Select Button
- 17 Set Button
- 18 Volume Up/Down Selectors
- 19 Transport Fast-Play/Scan Buttons
- 20 Main Transport Controls
- 21 Track Skip Up/Down Buttons
- 22 Preset Up/Down Button
- 23 Tuning Up/Down Button
- 24 Disc Skip Button
- 25 Program Button
- 26 Light Button
- 27 Multiroom Button
- 28 Macro Buttons
- 29 Sleep Button
- 30 Night Mode Button
- 31 OSD Button
- 32 Tone Control Button
- 33 Mute Button
- 34 AM/FM Button
- 35 Channel Up/Down Selector
- 36 Transport Play Buttons
- 37 Delay Select Button
- 38 Speaker Select Button
- 39 Memory Button
- 40 Stereo Mode Select Button
- 41 DTS Neo:6 Mode Select Button
- 42 DTS Digital Mode Select Button
- 43 Dolby Mode Select Button
- 44 6/8-Channel Input Select
- 45 SPL Select Button
- 46 EzSet Microphone Sensor
- 47 Lens



NOTES:

- The function names shown here are each button's feature when used with the AVR . Most buttons have additional functions when used with other devices. When a button is pressed, the function name will appear in the bottom line of the **LCD Information Display** (3).
- The jack on the upper right side of the remote is reserved for future use. Do not remove the plug provided or connect any device to the jack.
- To make it easier to follow the instructions that refer to this illustration, a larger copy may be downloaded from the Product Support section for this product at www.harmankardon.com.

MAIN REMOTE CONTROL FUNCTIONS

IMPORTANT NOTE: The AVR's remote may be programmed to control up to eight devices, including the AVR. Before using the remote, it is important to remember to press the **Input Selector Button** ④ that corresponds to the unit you wish to operate. In addition, the AVR's remote is shipped from the factory to operate the AVR and most Harman Kardon CD or DVD players and cassette decks. The remote is also capable of operating a wide variety of other products using the control codes that are part of the remote.

It is also important to remember that many of the buttons on the remote take on different functions, depending on the product selected using the **Input Selectors** ④. The descriptions shown here primarily detail the functions of the remote when it is used to operate the AVR.

1 Power Off Button: Press this button to place the AVR or a selected device in the Standby mode. Note that this will turn off the main room functions, but if the Multiroom system is activated, it will continue to function.

2 Power On Button: Press this button to turn on the power to a device selected by first pressing one of the **Input Selectors** ④.

3 LCD Information Display: This two-line screen displays various information depending on the commands that have been entered into the remote.

4 Input Selectors: Pressing one of these buttons will perform three actions at the same time. First, if the AVR is not turned on, this will power up the unit. Next, it will select the source shown on the button as the input to the AVR. Finally, it will change the remote control so that it controls the device selected. After pressing one of these buttons you must press the **AVR Selector Button** ⑤ again to operate the AVR's functions with the remote.

5 AVR Selector: Pressing this button will switch the remote so that it will operate the AVR's functions. If the AVR is in the Standby mode, it will also turn the AVR on.

6 Test Button: Press this button to begin the sequence used to calibrate the AVR's output levels.

7 DSP Surround Mode Selector: Press this button to select one of the DSP surround modes, such as VMAX, Hall 1, Hall 2 or Theater. Each press of the button selects another mode.

8 Logic 7 Mode Select Button: Press this button to select from among the available Logic 7 surround modes.

9 Direct Button: Press this button when the tuner is in use to start the sequence for direct entry of a station's frequency. After pressing the button, simply press the proper **Numeric Keys** ⑪ to select a station.

10 Clear Button: When programming the remote or using the EzSet feature, press this button to cancel the current function. When using the remote to enter frequencies for direct tuner access, press this button to clear previous entries.

11 Numeric Keys: These buttons serve as a ten-button numeric keypad to enter tuner preset positions. They are also used to select channel numbers when TV, Cable or SAT has been selected on the remote, or to select track numbers on a CD, DVD or LD player, depending on how the remote has been programmed. These buttons are also used to enter letters and numbers when renaming devices in the LCD Information Display.

12 Tuning Mode Button: Press this button to change the tuner mode between manual and automatic. When the button is pressed so that **AUTO / STEREO** appears in the **Upper Display Line** ⑬ and in the on-screen display, only stations with acceptable signal quality will be tuned, and the tuner will play FM stations in stereo, when available. In the **AUTO** mode, when the **Tuning Up/Down Buttons** ④ ⑬ ⑭ are pressed, the unit will automatically search for the next available station with good signal strength. When this button is pressed so that **MANUAL / MONO** appears in the **Upper Display Line** ⑬ and in the on-screen display each press of the **Tuning Up/Down Buttons** ④ ⑬ ⑭ will move the frequency up or down in single-step increments. When the FM band is in use, pressing the button so that the **MANUAL** mode is activated will enable you to tune stations with weak signals by changing to monaural reception.

13 Dim Button: Press this button to activate the Dimmer function, which reduces the brightness of the front-panel display, or turns it off entirely. Press the button once to change the display to reduce the brightness by 50%, and press it again within five seconds and the main display will go completely dark. Note that this setting is temporary; regardless of any changes, the display will always return to full brightness when the AVR is turned on. The blue illumination around the **Standby/On Switch** ① will always remain at full brightness regardless of the setting to remind you that the AVR is still turned on. The blue accent lighting inside the volume control will also remain at full brightness when the panel is at 50%, but go out when the panel lights are fully dimmed.

14 Channel Select Button: This button is used to start the process of setting the AVR's output levels to an external source. Once this button is pressed, press the **▲▼** on the **Navigation Button** ⑮ to select the channel being adjusted, then press the **Set Button** ⑯, followed by the **▲▼** on the **Navigation Button** ⑮ again, to change the level setting.

15 Navigation Button: This single disc-like button is used to navigate through the on-screen configuration menus, to scroll through the options list and to select choices for the various settings such as delay, speakers, surround modes, digital inputs, etc. To use the button, simply press it left, right, up or down in the direction indicated by the **▲▼◀▶** icons printed on the button disc. Depending on the menu being used, pressing the button will either change a specific menu or configuration choice or it will change the option shown in the on-screen or front-panel display. The sections in this manual describing the unit's individual features and configuration options contain specific information on how the navigation controls are used.

16 Digital Select Button: Press this button to assign one of the digital inputs ⑳ ⑳ ⑲ to a source.

17 Set Button: This button is used to enter settings into the AVR's memory. It is also used in the setup procedures for delay time, speaker configuration and channel output level adjustment.

18 Volume Up/Down Buttons: These controls share the common disc in the lower third of the remote. To raise the volume, press the button marked **▲** by pressing towards the top of the remote. To lower the volume, press the button marked **▼** by pressing towards the bottom of the remote. The **◀▶** buttons on the left and right sides of this disc change channels up or down when the TV, cable box or satellite **Input Selectors** ④ have been pressed.

MAIN REMOTE CONTROL FUNCTIONS

19 Transport Fast-Play/Scan Buttons: These buttons have no direct function on the AVR, but they are used when the remote is programmed for a compatible DVD, CD or tape player. Pressing these buttons will transmit a fast-play forward, fast-play reverse, or fast-forward or -reverse scan command, according to the capabilities of the player being controlled. In the factory default setting, these buttons are preprogrammed with the remote codes for Harman Kardon DVD players so that you may control a compatible player without having to switch devices.

20 Main Transport Controls: These buttons have no direct function on the AVR, but they are used when the remote is programmed for a compatible DVD, CD or tape player. Pressing these buttons will transmit a stop (■), record (●), or pause (II) command, according to the capabilities of the player being controlled. In the factory default setting, these buttons are programmed with the remote codes for Harman Kardon DVD players so that you may control a compatible player without having to switch devices.

21 Track Skip Up/Down Buttons: These buttons do not have a direct function with the AVR, but when used with a compatibly programmed CD or DVD changer will change the track or chapter currently being played. In the factory default setting, these buttons are programmed with the remote codes for Harman Kardon DVD players so that you may control a compatible player without having to switch devices.

22 Preset Up/Down Button: When the tuner is in use, press this button to scroll through the stations programmed into the AVR's memory.

23 Tuning Up/Down Button: Press this button when the tuner is in use to change the station to one with a higher or lower frequency. When the tuner is in the **MANUAL/MONO** mode, each tap of the Selector will increase or decrease the frequency by one increment. When the tuner receives a strong-enough signal for adequate reception, **MANUAL TUNED** will appear in the **Lower Display Line 14** and in the on-screen display. When the tuner is in the **AUTO/STEREO** mode, press the button once, and the tuner will scan for a station with acceptable signal strength. When the next higher- or lower-frequency station with a strong enough signal is tuned, the frequency scan will stop and the **Lower Display Line 14** and the on-screen display will indicate **AUTO TUNED**. When an FM Stereo station is tuned, the display will read **AUTO ST TUNED**. See page 34 for more information on using the tuner.

24 Disc Skip Button: This button has no direct function for the AVR but may be used to change the disc in a CD or DVD changer when the remote is programmed for that type of device.

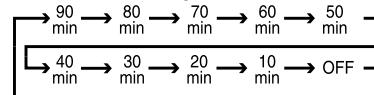
25 Program Button: This button is used to begin the process of programming the remote. Press and hold this button for three seconds to place the remote in the programming mode. Once the red LED under the **Set Button 17** lights, release the button. You may then select from the desired option.

26 Light Button: Press this button to activate the remote's backlight for ease of use in darkened rooms.

27 Multiroom Button: Press this button to begin the process of activating the multiroom system or to change the input or volume level for the second zone.

28 Macro Buttons: Press these buttons to store or recall a "Macro", which is a preprogrammed sequence of commands stored in the remote.

29 Sleep Button: Press this button to place the unit in the Sleep mode. After the time shown in the display, the AVR will automatically go into the Standby mode. Each press of the button changes the time until turn-off in the following order:



When the Sleep timer is in use the front panel displays indicators will dim to half brightness.

30 Night Mode Button: Press this button to activate the Night mode. This mode is available in specially encoded Dolby Digital sources, and it preserves dialogue (center channel) intelligibility at low volume levels.

31 OSD Button: Press this button to activate or turn off the On-Screen Display (OSD) system used to set up or adjust the AVR's parameters.

32 Tone Control Button: This button controls the tone mode settings, enabling adjustment of the bass and treble boost/cut. You may also use it to take the tone controls out of the signal path completely for "flat" response. The first press of the button displays a **TONE IN** message in the **Lower Display Line 14** and in the on-screen display. To take the controls out of the signal path press either of the **▲/▼ Navigation Buttons 15** until the display reads

TONE OUT. To change the bass or treble settings, press the button again until the desired option appears in the **Lower Display Line 14** and in the on-screen display and then press either of the **▲/▼ Navigation Buttons 15** to enter the desired boost or cut setting.

33 Mute Button: Press this button to momentarily silence the AVR or TV set being controlled, depending on which device has been selected.

34 AM/FM Button: Press this button to select the AVR's tuner as the listening choice. Pressing this button when the tuner is already in use will select between the AM and FM bands.

35 Channel Up/Down Selector: This button has no function when the AVR is being controlled, but when programmed for use with a VCR, TV, cable box, satellite receiver or other similar product it will change the channel up or down.

36 Transport Play Buttons: These buttons have no direct function on the AVR, but they are used when the remote is programmed for a compatible DVD, CD or tape player. Pressing these buttons will transmit a forward- or reverse-play command, according to the capabilities of the player being controlled. In the factory default setting, these buttons are programmed for Harman Kardon DVD players so that you may control a compatible player without having to switch devices.

37 Delay Select Button: This button selects adjustments to the A/V Sync Delay and the individual channel displays. The first press of the button displays an **A/V SYNC DELAY** message in the **Lower Display Line 14** and in the on-screen display, which means that you may change the amount of time that all channels are delayed together behind the video. This enables you to compensate for the loss of lip sync that may be caused by digital video processing in your display or by television stations. To change the A/V Sync Delay, press the **Set Button 17** while the **A/V SYNC DELAY** message is visible and then use the **▲/▼ Navigation Button 15** to change the setting so that the sound and the video image are in sync. To change the delay for an individual output channel, press the **▲/▼ Navigation Button 15** until the desired channel name is shown, and then press the **Set Button 17**. Use the **▲/▼ Navigation Buttons 15** to change the delay amount.

38 Speaker Select Button: Press this button to begin the process of configuring the AVR 630's bass management system. Then press the **▲/▼ Navigation Button 15** to select the channel you wish to set up. Press the **Set Button 17** and then select another channel to configure. When all adjustments have been completed, press the **Set Button 17** twice to exit the settings and return to normal operation.

MAIN REMOTE CONTROL FUNCTIONS

39 Memory Button: Press this button to enter a radio station to the AVR's preset memory. First, tune the desired station, and then press this button. Within five seconds of when you see the station's frequency flash in the **Upper Display Line 13** and in the on-screen display, press the numeric keys for the preset number between 01 and 30 that you wish to assign to the station.

40 Stereo Mode Select Button: Press this button to select a stereo listening mode. When the button is pressed so that **SURROUND OFF** appears in the **Lower Display Line 14**, the AVR will operate in a bypass mode with true, fully analog, two-channel left/right stereo mode with no surround processing or bass management, as opposed to other modes where digital processing is used. When the button is pressed so that **SURROUND OFF** appears in the **Lower Display Line 14**, and the **DSP** and **SURROUND OFF** **Surround Mode Indicators 15** are lit, you will enjoy a two-channel presentation of the sound along with the benefits of bass management. Depending on whether your system is configured for 5.1 or 6.1/7.1 channels, the next press of the button will cause either **5 CH STEREO** or **7 CH STEREO** to appear, and the stereo signal will be routed to all five (or seven) speakers.

41 DTS Neo:6 Mode Select Button: Press this button to select a DTS Neo:6 mode.

42 DTS Digital Mode Select Button: When a DTS-encoded digital source is playing, each press of this button will scroll through the available DTS modes. The specific choice of modes will vary according to the type of encoding on the disc and your system's speaker configuration. When a DTS source is not in use, this button has no function.

43 Dolby Mode Select Button: This button is used to select from the available Dolby Surround modes. Each press of this button will select one of the Dolby Pro Logic II modes or Dolby 3 Stereo. When a Dolby Digital-encoded source is in use, the Dolby Digital mode may also be selected.

44 6-Channel/8-Channel Input Select: Press this button to select the device connected to the **6-** or **8-Channel Direct Inputs 40**.

45 SPL Select Button: This button activates the EzSet function to quickly and accurately calibrate the AVR's output levels. When the button is pressed you will then need to select between automatic EzSet operation or using the remote as a manual SPL meter by pressing the **▲/▼ Navigation Button 15** until your choice appears in the remote's LCD display. Press the **Set Button 17** to enter the setting, and then follow the instructions as displayed in the LCD display.

46 EzSet Microphone Sensor: The microphone sensor that is used by the EzSet system is behind the three slots at the top of the remote control. When using EzSet to calibrate the AVR, be certain that the slots are not covered.

47 Lens: The infrared emitters behind the plastic lens at the top of the remote communicate the remote codes to the AVR. Be certain that the lens is not covered when using the remote, and point the lens toward the AVR for best results. In learning mode, the remote receives IR codes to be learned through a sensor behind the lens.

NOTE: DO NOT remove the rubber plug that is supplied to cover the jack on the upper right side of the remote. The jack is not active and is reserved for future use.

TROUBLESHOOTING GUIDE

| SYMPTOM | CAUSE | SOLUTION |
|--|--|--|
| Unit does not function when Main Power Switch is pushed | <ul style="list-style-type: none"> No AC Power | <ul style="list-style-type: none"> Make certain AC power cord is plugged into a live outlet Check to see whether outlet is switch-controlled |
| Display lights, but no sound or picture | <ul style="list-style-type: none"> Intermittent input connections Mute is on Volume control is down | <ul style="list-style-type: none"> Make certain that all input and speaker connections are secure Press Mute Button 33 Turn up volume control |
| Unit turns on, but front-panel display does not light up | <ul style="list-style-type: none"> Display brightness is turned off | <ul style="list-style-type: none"> Follow the instructions in the Display Brightness section on page 36 so that the display is set to VFD FULL |
| No sound from any speaker; light around power switch is red | <ul style="list-style-type: none"> Amplifier is in protection mode due to possible short Amplifier is in protection mode due to internal problems | <ul style="list-style-type: none"> Check speaker wire connections for shorts at receiver and speaker ends Contact your local Harman Kardon service center |
| No sound from surround or center speakers | <ul style="list-style-type: none"> Incorrect surround mode Input is monaural Incorrect configuration Stereo or Mono program material | <ul style="list-style-type: none"> Select a mode other than Stereo There is no surround information from mono sources Check speaker mode configuration The surround decoder may not create center- or rear-channel information from non-encoded programs |
| Unit does not respond to remote commands | <ul style="list-style-type: none"> Weak batteries in remote Wrong device selected Remote sensor is obscured | <ul style="list-style-type: none"> Change remote batteries Press the AVR selector Make certain front-panel sensor is visible to remote or connect remote sensor |
| Intermittent buzzing in tuner | <ul style="list-style-type: none"> Local interference | <ul style="list-style-type: none"> Move unit or antenna away from computers, fluorescent lights, motors or other electrical appliances |
| Letters flash in the channel indicator display and digital audio stops | <ul style="list-style-type: none"> Digital audio feed paused | <ul style="list-style-type: none"> Resume play for DVD Check that Digital Input is selected |

Processor Reset

In the rare case where the unit's operation or the displays seem abnormal, the cause may involve the erratic operation of the system's memory or microprocessor.

To correct this problem, first unplug the unit from the AC wall outlet and wait at least three minutes. After the pause, reconnect the AC power cord and check the unit's operation. If the system still malfunctions, a system reset may clear the problem.

To clear the AVR 's entire system memory including tuner presets, output level settings, delay times and speaker configuration data, first put the unit in Standby by pressing the **Standby/On Switch** 1. Next, press and hold the **Surround Mode Group Selector** 2 and the **Tuning Mode Selector** 8 buttons for three seconds.

The unit will turn on automatically and display the **RESET** message in the **Upper Display Line** 13.

NOTE: Resetting the processor will erase any configuration settings you have made for speakers, output levels, surround modes, digital input assignments as well as the tuner presets. After a reset the unit will be returned to the factory presets, and all settings for these items must be reentered.

If the system is still operating incorrectly, there may have been an electronic discharge or severe AC line interference that has corrupted the memory or microprocessor.

If these steps do not solve the problem, consult an authorized Harman Kardon service center.

SERVICE PROCEDURE

ALIGNMENT PROCEDURES

1.MAIN AMP idling Adjustment

SET CONDITION

- 1) SEMI VOLUME POSITION at MAIN/SURROUND AMP Board
 MAIN:VR71.VR74
 SURROUND:VR72.VR73

NO Signal/No Load
 AC Line Voltage:120V/60Hz.230V/50Hz

- 2) After turning on the unit keep it over than 25min (keep the power/Driver TR as normal temperature)
 3) Adjust the voltage value of primary&secondary of wafer to be 25mV by rotating the semi volume of each channel to the right

| CHANNEL | ADJUSTMENT | MEASUREMENT | VOLTAGE |
|---------------|------------|-------------|----------|
| FRONT-L CH | VR-71 | P801 | 23+/-2mV |
| FRONT-R CH | VR-74 | P804 | 23+/-2mV |
| SURROUND-L CH | VR-73 | P803 | 23+/-2mV |
| SURROUND-R CH | VR-72 | P802 | 23+/-2mV |

- 4) CAUTION
 In case that power TR or DRIVER TR is needed to be replace for repairing the corresponding channel should be adjusted again

FRONT AMP:Q433.Q435.Q437.Q439.Q330.Q332.Q334.Q336
 SURROUND AMP:Q434.Q436.Q438.Q440.Q329.Q331.Q333.Q335

2.SURROUND BACK AMP idling Adjustment

SET CONDITION

- 1) SEMI VOLUME POSITION at CENTER/SURROUND BACK AMP Board
 CENTER:VR32
 SURROUND BACK:VR31.VR51

NO Signal/No Load
 AC Line Voltage:120V/60Hz.230V/50Hz

- 2) After turning on the unit keep it over than 25min (keep the power/Driver TR as normal temperature)
 3) Adjust the voltage value of primary&secondary of wafer to be 25mV by rotating the semi volume of each channel to the right

| CHANNEL | ADJUSTMENT | MEASUREMENT | VOLTAGE |
|---------------|------------|-------------|----------|
| CENTER | VR-32 | P308 | 23+/-2mV |
| SUR BACK-L CH | VR-31 | P301 | 23+/-2mV |
| SUR BACK-R CH | VR-51 | P309 | 23+/-2mV |

- 4) CAUTION
 In case that power TR or DVIER TR is needed to be replace for repairing the corresponding channel should be adjusted again

CENTER AMP:Q416.Q417.Q418.Q419
 SUR BACK AMP:Q316.Q317.Q318.Q319.Q516.Q517.Q518.Q519

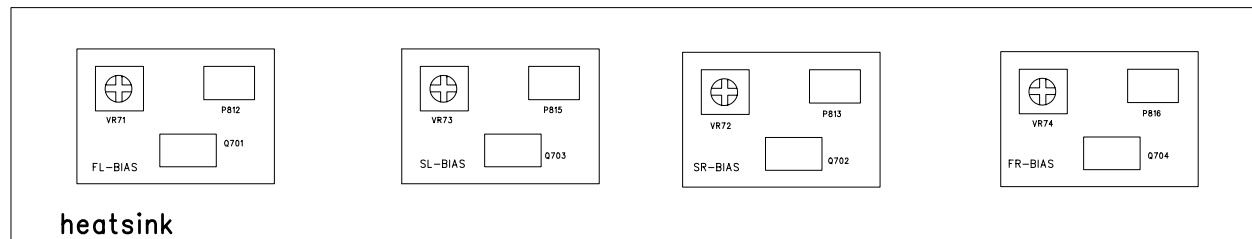
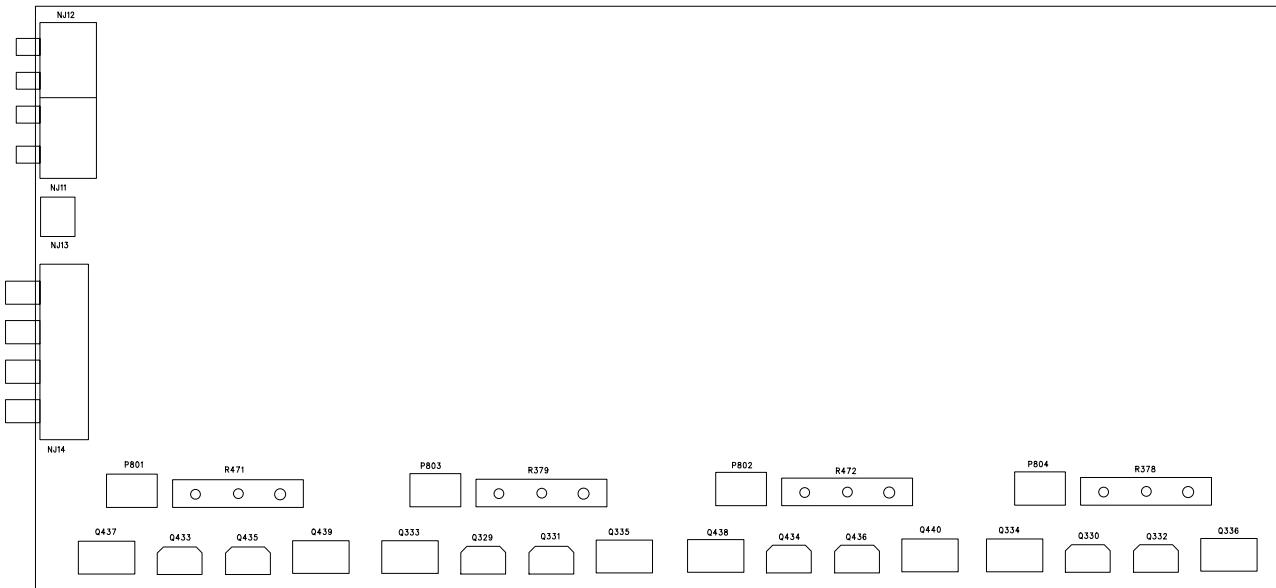
3.Cautions for main adjustment

- 1) At MAIN/SURROUND BACK BOARD.use the below capacitor after discharging for sufficient time for preventing possible damage from electrical spark

| | | |
|--------------------------|-----------|------------------|
| MAIN BOARD | C504.C505 | AVR630 15000/63V |
| | C571.C572 | AVR430 12000/63V |
| SUR BACK CENTER BOARD | C201.C202 | AVR630 10000/63V |
| | C201.C202 | AVR430 8200/63V |

- 2)The checking for MAIN/SURR-BACK BOARD should have the discharging circuit discharge over 30sec.through(4R7Ohm 10W)resistor after push power sw off

Alignment and test Position (Main amp Board)



10

9

8

7

6

5

4

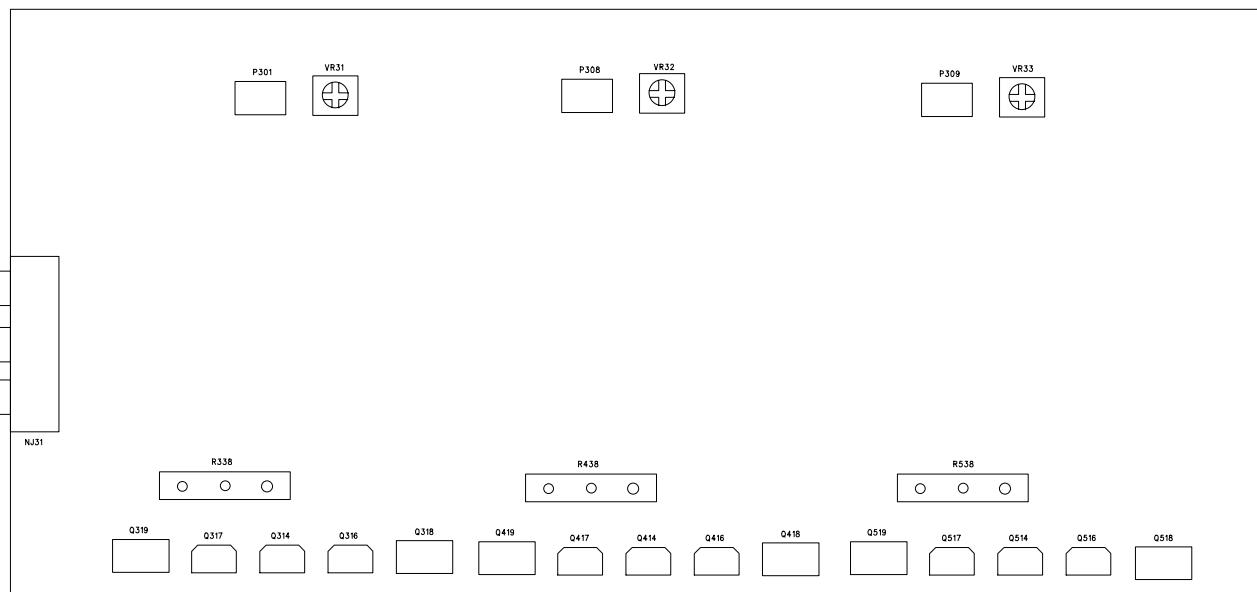
3

2

1

| REVISION RECORD | | |
|-----------------|------|----------|
| NO. | Date | Contents |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Alignment and test Position (3ch.sb-back amp board)



harman/kardon

Service Bulletin

Service bulletin # HK2004-04 October 2004

Warranty labor rate: MAJOR repair

To: All harman/kardon Service Centers

Model: AVR430, AVR630

Subject: Rewiring Bias/Fan cables

In the event you receive an AVR430 or AVR630 with the complaint: “the unit intermittently goes in standby or the fan runs constantly” perform the following modification. Please note other component or connection failures can cause the unit to go in to standby.

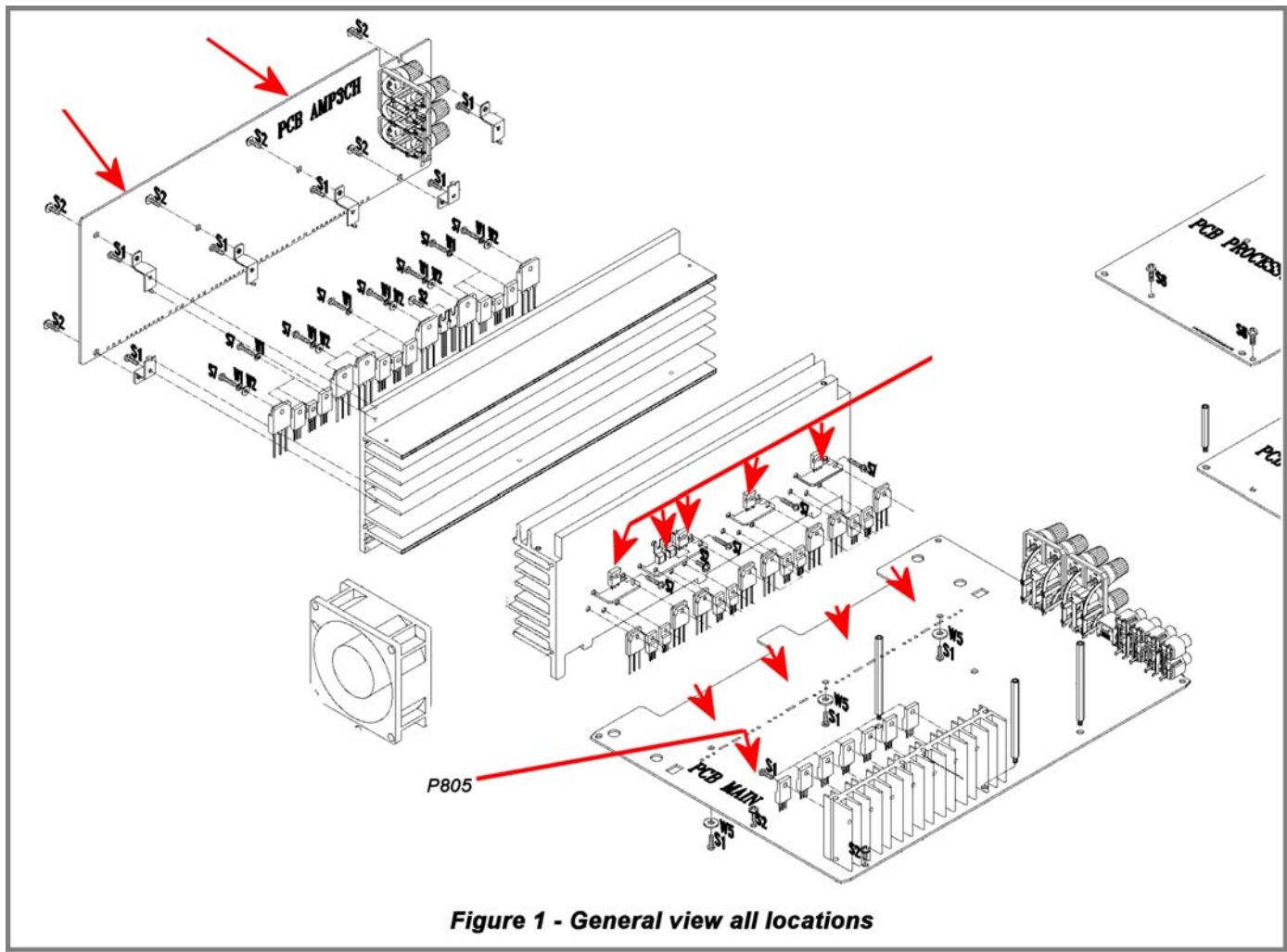
Synopsis: Hard wire Bias/Fan cables (7 cables, 12 connectors) from Bias PCB's to main PCB, surround PCB.
Recheck all bias voltages.

- 1) Remove the top cover
 - 2) Remove the DSP and Processor boards.
 - 3) Locate and identify Bias cables connecting Bias and Surround PCB's to main PCB:

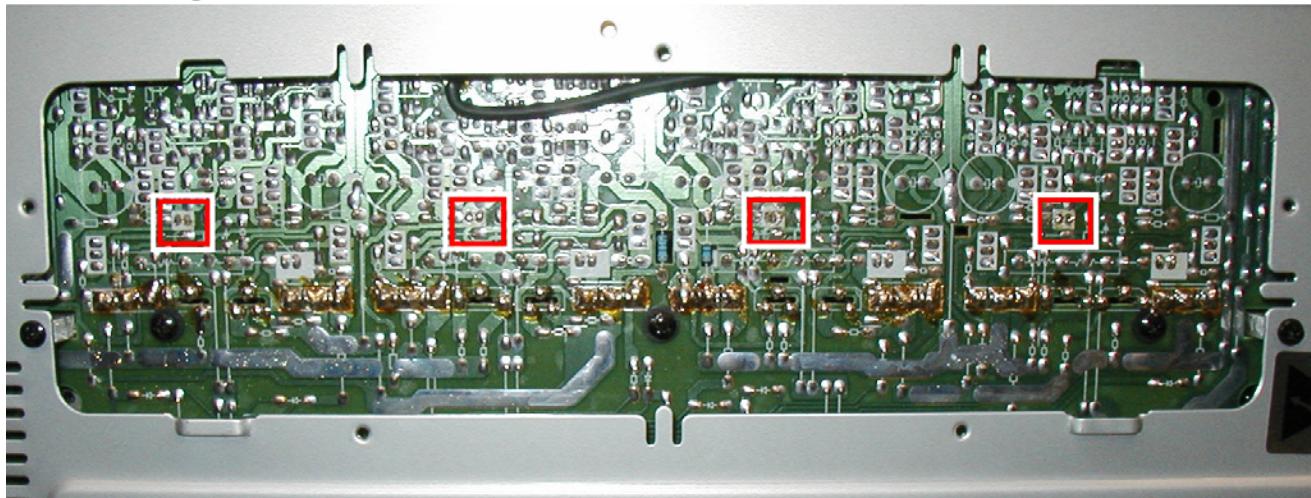
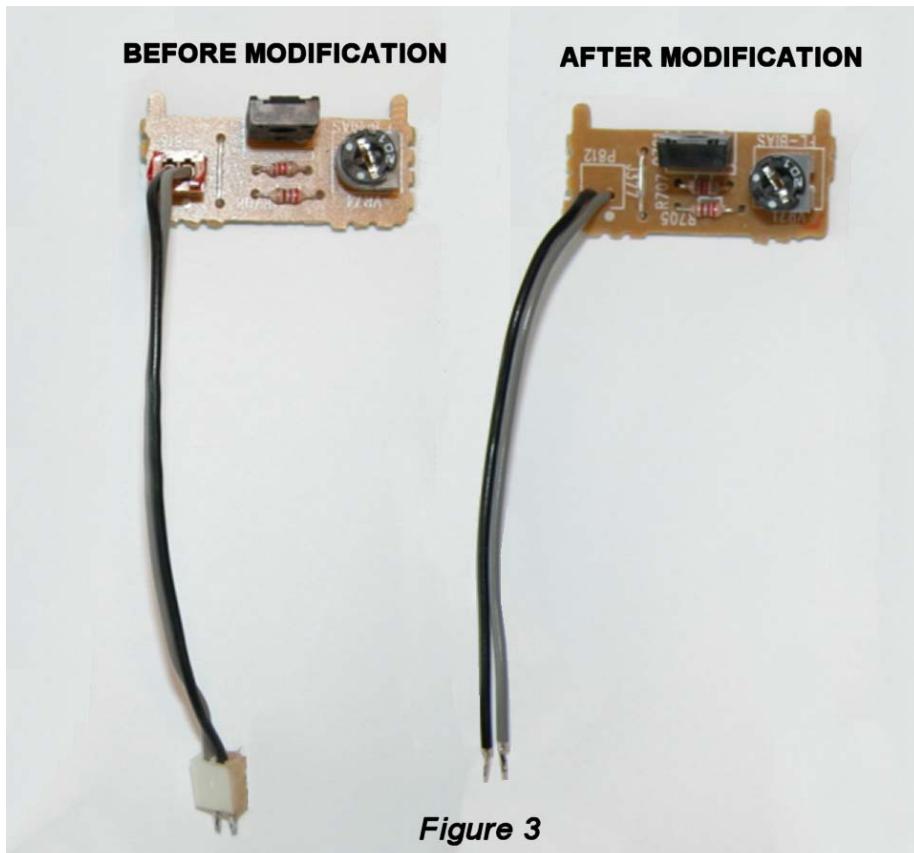
MAIN PCB Location: P805, N801, N802, N803, N804

SURROUND PCB Location: N301, P307

BIAS PCB Location: P812, P813, P814, P815, P816



- 4) Unplug each the cable on the Bias PCB, desolder the female plugs, cut the connectors off each wire, strip the insulation 1/8" on each end and solder directly to the PCB assembly in each location.
- 5) For locations N801, N802, N803, N804 on the Main PCB, set the unit on its side and remove the bottom grille. (See Figure 2) Desolder and remove each connector. Cut the connectors off each wire, strip the insulation 1/8" on each end and solder directly to the PCB assembly in each location.
- 6) For location P805 (see Figure 1) on the Main PCB, unplug the cable, carefully cut away the female plug with diagonal cutters on the PCB surface, leaving the three conductors intact. Cut the connector off each wire, strip the insulation 1/8" on each end, slide a piece of shrink tubing on each conductor and solder each wire directly to the three conductors on the PCB. Heat the shrink tubing to complete the connection, and add some silicon seal or similar adherent to affix the wires on the PCB.

*Figure 2***BOTTOM OF MAIN PCB****Location of N801, N802, N803, N804***Figure 3*

- 7) Replace the DSP and Processor boards
- 8) Recheck all bias voltages, following the instructions below:

MAIN AMP IDLE CURRENT ADJUSTMENT PROCEDURE
 (Set variable resistors for MAIN/SURROUND Board)

Specialized equipment/parts needed:

Variable AC transformer ("Variac" type) to adjust and monitor AC line voltage.

Two pin harness plug to connect DMM to idle current test points, hk part# 55212910NR or equivalent

Conditions:

No Signal; No Load

AC Line Voltage adjust to: 120V/60Hz (120v model) or 230V/50Hz (230v model)

After turning the unit ON for 25 minutes or more to keep the Power/Driver TR at normal temperature, adjust the DC voltage at the two pin connector to the specified value by rotating the variable resistors. VR71-74 are located on the Bias PCB's.

P801-804 are located on the main PCB just below the Bias PCB's. To guide/seat the two pin harness plug into the sockets, you may have to attach the harness wire to a long blade screwdriver as P801-803 are in a deep recess.

| CHANNEL | ADJUSTMENT | MEASUREMENT POINT | VOLTAGE |
|-----------------|------------|-------------------|-----------|
| FRONT L CHAN | VR71 | P801 | 23mV ±2mV |
| FRONT R CHAN | VR74 | P804 | 23mV ±2mV |
| SURROUND L CHAN | VR73 | P803 | 23mV ±2mV |
| SURROUND R CHAN | VR72 | P802 | 23mV ±2mV |

SURROUND BACK AMP IDLE CURRENT ADJUSTMENT PROCEDURE

Same conditions as above.

After turning the unit ON for 25 minutes or more to keep the Power/Driver TR at normal temperature, adjust the voltage value at the two pin connector to the specified value by rotating the variable resistors. VR31,32,51 and P301,308,309 are located at the top edge of the Surround PCB

| CHANNEL | ADJUSTMENT | MEASUREMENT POINT | VOLTAGE |
|-----------------|------------|-------------------|-----------|
| CENTER | VR32 | P308 | 23mV ±2mV |
| SURROUND BACK L | VR31 | P301 | 23mV ±2mV |
| SURROUND BACK R | VR51 | P309 | 23mV ±2mV |

- 9) After 5 minutes, check all voltages again at measurement points and re-adjust if necessary.
- 10) After more 5 minutes, check all voltages again at measurement points and re-adjust if necessary.
- 11) Replace the top cover and test the unit.

| MODEL | SERIAL NUMBER (120V) | SERIAL NUMBER (230V) | STATUS | ACTION |
|--------|------------------------------------|------------------------------------|---|-----------------------------------|
| AVR430 | TF0001-01000 to TF0001-08116 | TF0006-01000 to TF0006-06663 | Unit may shut down or fan may run continuously | Hard wire bias cables to PCB's |
| AVR430 | TF0007-08117 and above | TF0007-06664 and above | Modified by Factory | None Required |
| AVR630 | TF0002-01000 to TF0002-11138 | TF0007-01000 to TF0007-05650 | Unit may shut down or fan may run continuously | Hard wire bias cables to PCB's |
| AVR630 | TF0002-11139 and above | TF0007-05651 and above | Modified by Factory | None Required |

harman/kardon

TECH TIPS

Troubleshooting tips and solutions to common service problems

TIP# HKTT2004-03

Isolating audio problems in an AVR receiver Using 6/8 Direct In

The following charts are used to help the tech quickly isolate audio problems in an AVR receiver. Use the following procedures to help find what is working, then to quickly locate the problem area.

Equipment needed:

- ✓ 1 set of (RCA) Y adaptors.
- ✓ Function/signal generator.
- ✓ Oscilloscope.

| Models covered: | |
|-----------------|--------|
| AVR210 | AVR310 |
| AVR220 | AVR320 |
| AVR520 | AVR225 |
| AVR125 | AVR525 |
| AVR130 | AVR230 |
| AVR330 | AVR430 |
| AVR630 | |

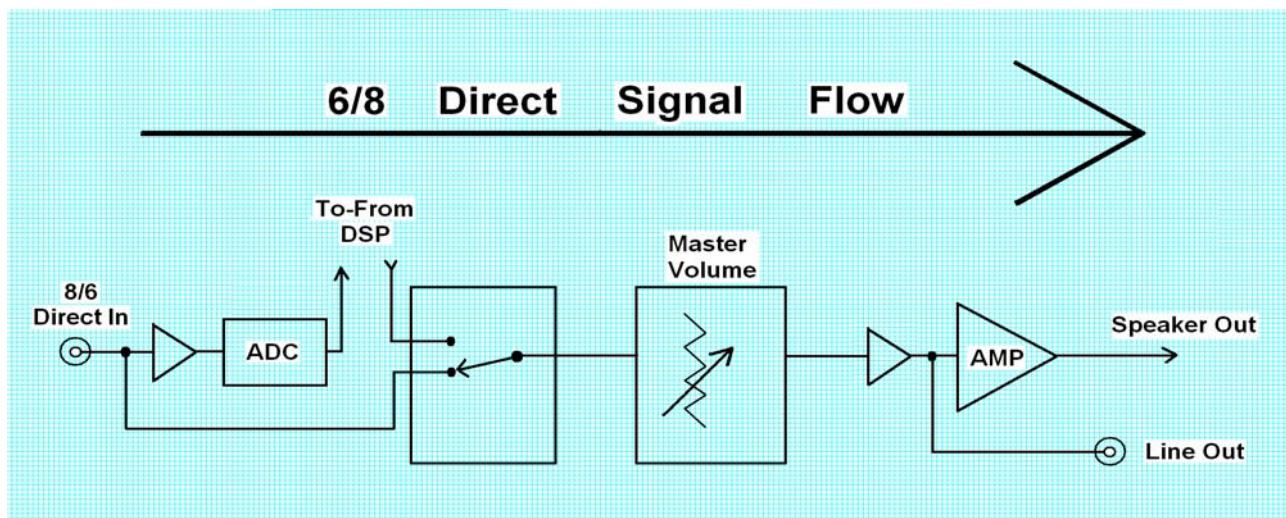
Procedure:

- 1) Do a factory reset of the receiver. (This will eliminate any common micro processor problems.) Reset List can be found in this service manual.
- 2) Print the block diagram from the service manual.
- 3) With no inputs or speakers attached to the AVR turn on the receiver and turn the volume all the way down.
- 4) Turn unit off.
- 5) Hook up an oscillator to the 6/8 Direct in jacks using the Y adaptors. Adjust the oscillator to about 0db (.775Volts RMS).
- 6) Hook up an oscilloscope to monitor the line out jacks. Or, if there are no line out (preamp out) jacks monitor the input to the power amps or the speaker outs. (AVR125, 225, 130 do not have preamp out jacks)
- 7) Turn the AVR on. Select 6 or 8 direct in, depending on the receiver.
- 8) Slowly turn the volume control up until you can easily measure the voltage at the line out jacks. (-40 to -25db)

Isolating audio problems in an AVR receiver Using 6/8 Direct In

- 9) At this point you will be able to check and assure all output levels are the same.
- 10) IF THE OUTPUT LEVELS ARE NOT THE SAME STOP! Go no further. At this point you will need to use the charts to see where you are losing your signal. The chart shows the analog signal flow from the input jacks to the output jacks.
- 11) If the output levels are the same check the power out stage at the speaker out jacks.
- 12) If you find the levels at the speaker out jacks are OK, your problem will be in the DSP part of the receiver.

Congratulations! You have now eliminated 90% of the electronics in the AVR and confirmed that the problem is in the DSP section.



Isolating audio problems in an AVR receiver Using 6/8 Direct In

AVR,210,310,510

| | | 6 CH IN | | | | | | | | | | | | | | | | | | | | | |
|----|---|-----------|------------|--------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|--------|
| | | IC 501 In | IC 501 Out | CN 408 | IC 704 In | IC 704 Out | IC 705 In | IC 705 Out | IC 706 In | IC 706 Out | IC 705 In | IC 705 Out | IC 706 In | IC 706 Out | IC 705 In | IC 705 Out | IC 716 In | IC 716 Out | IC 717 In | IC 717 Out | IC 718 In | IC 718 Out | CP 405 |
| FR | 3 | 1 | 15 | 2 | 4 | 8 | 9 | 4 | 3 | 19 | 17 | 3 | 1 | | | | | | | | | | 3 |
| FL | 5 | 7 | 13 | 27 | 25 | 21 | 20 | 25 | 26 | 10 | 12 | 5 | 7 | | | | | | | | | | 1 |
| SR | | 11 | 5 | 7 | | | 7 | 6 | | | | | 5 | 7 | | | | | | | | | 9 |
| SL | | 9 | 24 | 22 | | | 22 | 23 | | | | | 3 | 1 | | | | | | | | | 7 |
| C | | 5 | 21 | 19 | | | 19 | 20 | | | | | | | | | | | | | | 3 | 1 |
| SW | | 7 | 8 | 10 | | | 10 | 9 | | | | | | | | | | | | | | 5 | 7 |
| | | | | | | | | | | | | | | | | | | | | | | 11 | |

AVR220

| | | 6 CH IN | | | | | | | | | | | | | | | | | | | | | |
|----|---|-----------|------------|--------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|--------|----|---|
| | | IC 501 In | IC 501 Out | CN 408 | IC 704 In | IC 704 Out | IC 705 In | IC 705 Out | IC 706 In | IC 706 Out | IC 714 In | IC 714 Out | IC 705 In | IC 705 Out | IC 716 In | IC 716 Out | IC 717 In | IC 717 Out | IC 718 In | IC 718 Out | CP 405 | | |
| FR | 5 | 7 | 15 | 2 | 4 | 8 | 9 | 4 | 3 | 5 | 7 | 10 | 12 | 5 | 7 | | | | | | | | 1 |
| FL | 3 | 1 | 13 | 27 | 25 | 21 | 20 | 25 | 26 | 3 | 1 | 19 | 17 | 3 | 1 | | | | | | | | 3 |
| SR | | 11 | 5 | 7 | | | 7 | 6 | | | | | | | | | | | | | | 5 | 7 |
| SL | | 9 | 24 | 22 | | | 22 | 23 | | | | | | | | | | | | | | 3 | 1 |
| C | | 5 | 21 | 19 | | | 19 | 20 | | | | | | | | | | | | | | 3 | 1 |
| SW | | 7 | 8 | 10 | | | 10 | 9 | | | | | | | | | | | | | | 5 | 7 |
| | | | | | | | | | | | | | | | | | | | | | | 11 | |

AVR320/520

| | | 8 CH IN | | | | | | | | | | | | | | | | | | | | | |
|-----|---|-----------|------------|--------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|--------|----|---|
| | | IC 501 In | IC 501 Out | CN 408 | IC 704 In | IC 704 Out | IC 705 In | IC 705 Out | IC 706 In | IC 706 Out | IC 714 In | IC 714 Out | IC 705 In | IC 705 Out | IC 716 In | IC 716 Out | IC 717 In | IC 717 Out | IC 718 In | IC 718 Out | CP 405 | | |
| FR | 5 | 7 | 15 | 2 | 4 | 8 | 9 | 4 | 3 | 5 | 7 | 10 | 12 | 5 | 7 | | | | | | | | 1 |
| FL | 3 | 1 | 13 | 27 | 25 | 21 | 20 | 25 | 26 | 3 | 1 | 19 | 17 | 3 | 1 | | | | | | | | 3 |
| SR | | 11 | 5 | 7 | | | 7 | 6 | | | | | | | | | | | | | | 5 | 7 |
| SL | | 9 | 24 | 22 | | | 22 | 23 | | | | | | | | | | | | | | 3 | 1 |
| C | | 5 | 21 | 19 | | | 19 | 20 | | | | | | | | | | | | | | 3 | 1 |
| SW | | 7 | 8 | 10 | | | 10 | 9 | | | | | | | | | | | | | | 5 | 7 |
| | | | | | | | | | | | | | | | | | | | | | | 11 | |
| SBR | 3 | 3 | 3 | 4 | 21 | 23 | 5 | 7 | | | | | | | | | | | | | | | |
| SBL | 1 | 1 | 25 | 26 | 4 | 2 | 3 | 1 | | | | | | | | | | | | | | | |

AVR225/125

| | | 6 CH IN | | | | | | | | | | | | | | | | |
|------|----|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|------|----------|-----------|----------|-----------|---------|----------|
| | | IC 30 In | IC 30 Out | IC 31 In | IC 31 Out | IC 32 In | IC 32 Out | IC 33 In | IC 33 Out | IC 34 In | IC 34 Out | BN12 | IC 81 In | IC 81 Out | IC 80 In | IC 80 Out | BN16 In | BN16 Out |
| L ch | 27 | 25 | 19 | 20 | 5 | 7 | | | | | 1 | 3 | 1 | 9 | 10 | 1 | 2 | |
| R ch | 24 | 22 | 22 | 23 | 3 | 1 | | | | | 3 | 5 | 7 | 15 | 14 | 4 | 5 | |
| SL | 5 | 4 | 7 | 6 | | | | 5 | 7 | 9 | | | | | | | | |
| SR | 2 | 4 | 10 | 9 | | | | 3 | 1 | 11 | | | | | | | | |
| C | 8 | 18 | 4 | 3 | | | 3 | 1 | | | 7 | | | | | | | |
| SW | 21 | 19 | 25 | 26 | | | 5 | 7 | | | 5 | | | | | | | |

Isolating audio problems in an AVR receiver Using 6/8 Direct In

AVR 525

| In Jack | N404 | P6 | IC5 In | IC5 Out | IC3 In | IC3 Out | IC19 In | IC19 Out | IC18 In | IC20 In | IC20 Out | IC3 In | IC3 Out | IC18 Out | IC23 In | IC23 Out | IC25 In | IC25 Out | IC24 In | IC24 Out | IC26 In | IC26 Out | P9 | N806 |
|---------|------|----|--------|---------|--------|---------|---------|----------|---------|---------|----------|--------|---------|----------|---------|----------|---------|----------|---------|----------|---------|----------|----|------|
| FL | 1 | 1 | | | 10 | 9 | | | 4 | 2 | 3 | 1 | 3 | 5 | 3 | 1 | | | | | | | 1 | 1 |
| FR | 3 | 3 | | | 21 | 22 | | | 21 | 23 | 5 | 7 | 28 | 6 | 6 | 7 | | | | | | | 3 | 3 |
| SL | 5 | 5 | 2 | 4 | | | 4 | 3 | | | | | | | | | | | | | | | 5 | 5 |
| SR | 7 | 7 | 29 | 27 | | | 25 | 26 | | | | | | | | | | | | | | | 7 | 7 |
| CTR | 9 | 9 | 5 | 7 | | | 7 | 6 | | | | | | | | | | | | | | | 3 | 1 |
| SW | 11 | 11 | 26 | 24 | | | 22 | 23 | | | | | | | | | | | | | | | 5 | 7 |
| SBL | 13 | 13 | 8 | 10 | | | 10 | 9 | | | | | | | | | | | | | | | 3 | 1 |
| SBR | 15 | 15 | 23 | 21 | | | 19 | 20 | | | | | | | | | | | | | | | 6 | 7 |
| | | | | | | | | | | | | | | | | | | | | | | | 15 | 15 |

AVR130

| 6 ch in | IC 23 In | IC 23 Out | IC 26 In | IC 26 Out | IC 42 In | IC 42 Out | IC 44 In | IC 44 Out | IC 43 In | IC 43 Out | IC 40 In | IC 40 Out | IC 49 In | IC 49 Out | BN 12 | BN 11 |
|---------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|-------|-------|
| L | 18 | 17 | | | 21 | 23 | | | | | | | | | 1 | |
| R | 19 | 12 | | | 4 | 2 | | | | | | | | | | 14 |
| SL | | 24 | 22 | | | | 21 | 23 | | | | | | | | 9 |
| SR | | 5 | 7 | | | 4 | 2 | | | | | | | | | 7 |
| C | | 27 | 25 | | | | | 21 | 23 | | | | | | | 5 |
| SUB | | 2 | 4 | | | | | 4 | 2 | | | | | | | 3 |
| SBL | | 21 | 19 | | | | | | | 21 | 23 | 5 | 7 | 13 | | |
| SBR | | 8 | 10 | | | | | | | 4 | 2 | 3 | 1 | 11 | | |

AVR230/330

| 6 ch in | IC 23 In | IC 23 Out | IC 26 In | IC 26 Out | IC 42 In | IC 42 Out | IC 44 In | IC 44 Out | IC 43 In | IC 43 Out | IC 40 In | IC 40 Out | IC 49 In | IC 49 Out | BN 12 | BN 11 |
|---------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|-------|-------|
| L | 18 | 17 | | | 21 | 23 | | | | | | | | | 1 | |
| R | 19 | 12 | | | 4 | 2 | | | | | | | | | | 14 |
| SL | | 24 | 22 | | | | 21 | 23 | | | | | | | | 9 |
| SR | | 5 | 7 | | | 4 | 2 | | | | | | | | | 7 |
| C | | 27 | 25 | | | | | 21 | 23 | | | | | | | 5 |
| SUB | | 2 | 4 | | | | | 4 | 2 | | | | | | | 3 |
| SBL | | 21 | 19 | | | | | | | 21 | 23 | 5 | 7 | 13 | | |
| SBR | | 8 | 10 | | | | | | | 4 | 2 | 3 | 1 | 11 | | |

AVR630/430

| 8 CH In | N404 | IC 3 | IC 3 Out | IC 14 In | IC 14 Out | IC 12 In | IC 12 Out | IC 3 In | IC 3 Out | IC 27 In | IC 27 Out | IC 18 In | IC 18 Out | IC 20 In | IC 20 Out | IC 3 In | IC 3 Out |
|---------|------|------|----------|----------|-----------|----------|-----------|---------|----------|----------|-----------|----------|-----------|----------|-----------|---------|----------|
| FL | 1 | 10 | 12 | 10 | 9 | 3 | 1 | 6 | 9 | 3 | 1 | 4 | 2 | 3 | 1 | 3 | 1 |
| FR | 3 | 19 | 17 | 19 | 20 | 5 | 7 | 23 | 20 | 5 | 7 | 21 | 23 | 5 | 7 | 26 | 7 |
| SL | 5 | 2 | 4 | 4 | 3 | 3 | 1 | | | | | | | | | | |
| SR | 7 | 27 | 25 | 25 | 26 | 5 | 7 | | | | | | | | | | |
| CTR | 9 | 5 | 7 | 7 | 6 | | | 3 | 1 | | | | | | | | |
| SW | 11 | 24 | 22 | 22 | 23 | | | 5 | 7 | | | | | | | | |
| SBL | 13 | 8 | 10 | 10 | 9 | | | | | 3 | 1 | | | | | | |
| SBR | 15 | 21 | 19 | 19 | 20 | | | | | 5 | 7 | | | | | | |

harman/kardon**TECH TIPS****Troubleshooting tips and solutions to common service problems****For models:****TIP# HKTT2003-01 Rev5**

| | |
|------------------------|-----------------------|
| AVR7000/7200/7300/8000 | AVR10 |
| AVR100/200/300/500 | DPR1001 |
| AVR110/210/310/510 | DPR1005 |
| AVR120/220/320/520 | DPR2005 |
| AVR125/225/325/525 | HK3370/3470/3375/3475 |
| AVR130/230/330/430/630 | HK3250 |
| AVR135/235/335/435/635 | |

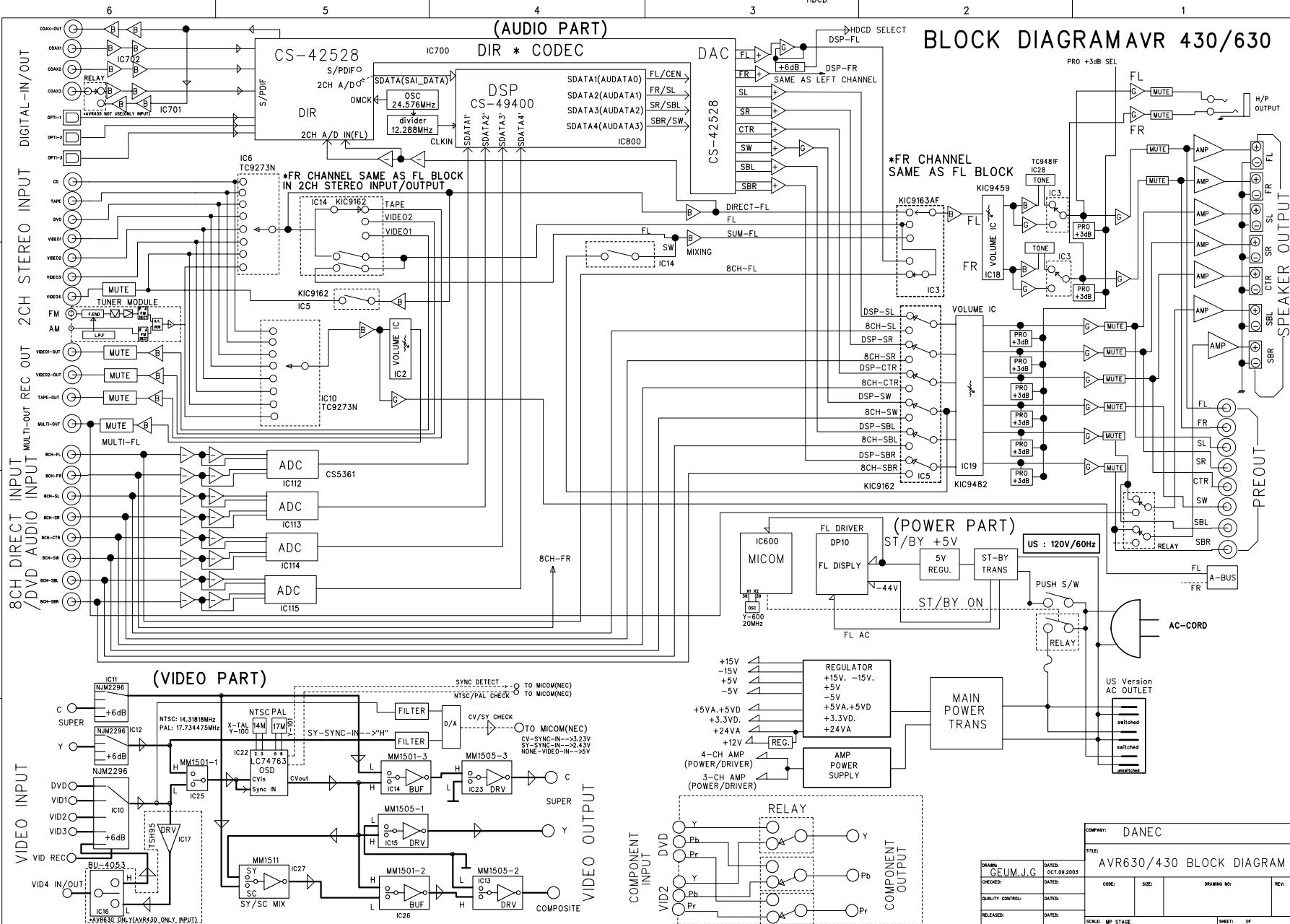
Subject: Backup Memory on AVR/DPR/HK series receivers**In the event of the complaint: “the receiver is losing its memory (any programmed system settings) when the unit is turned off, or after the unit is unplugged (briefly*)”:**

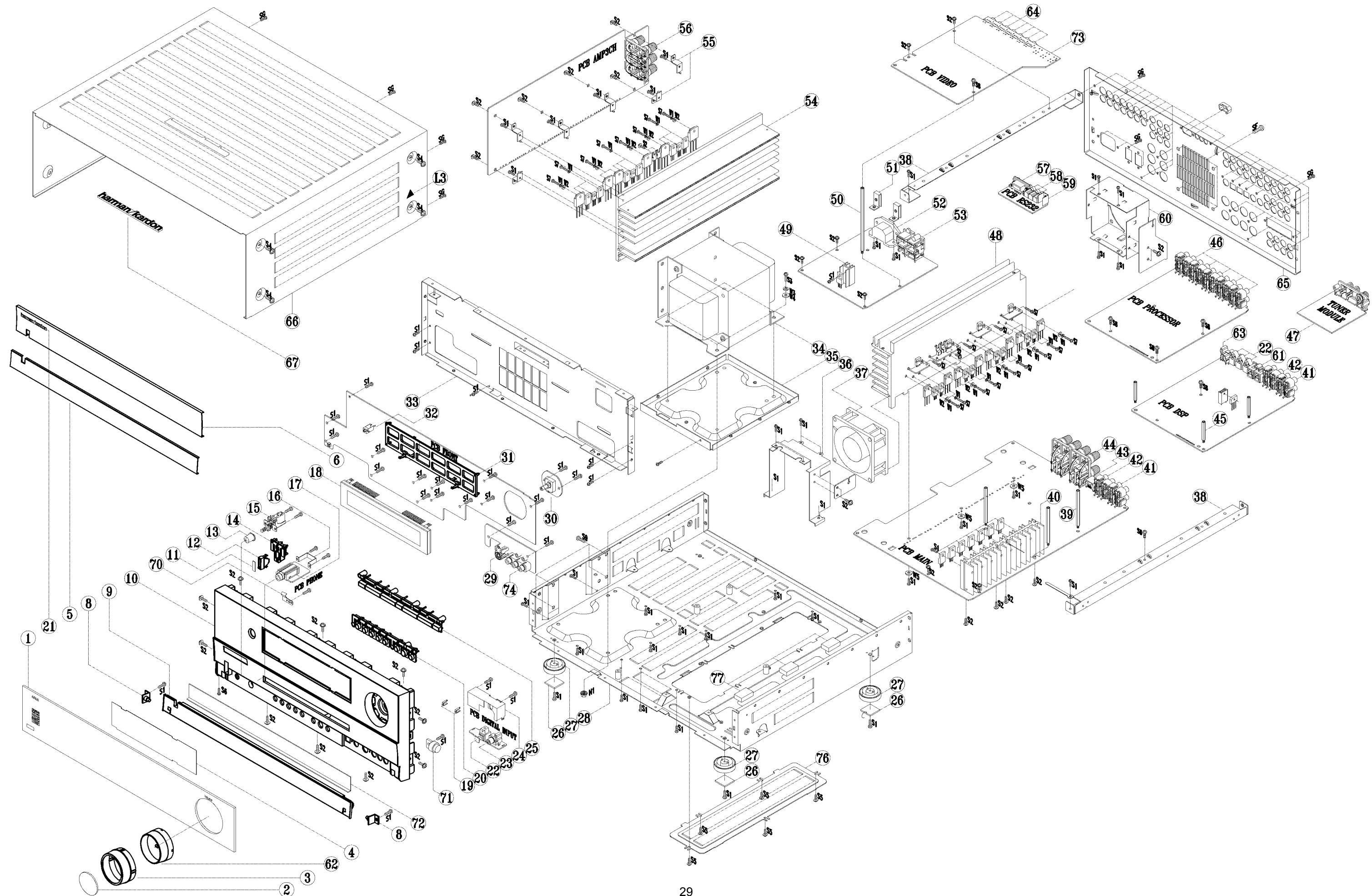
Check and replace:

| Model | Designator | Location | Description | Part number |
|--|--------------|---------------|---|----------------------------------|
| AVR10 | C712 D709 | Front PCB | 0.047 Farad 5.5v capacitor and 1N4148 diode | #3439247315 #2058322101 |
| AVR7000 | C730 | Front PCB | 0.047 Farad 5.5v capacitor | # P10790-ND or # J3432147324X |
| AVR7200 | C106 | Front PCB | 0.047 Farad 5.5v capacitor | # P10790-ND |
| AVR7300 | C657 | DSP PCB | 0.047 Farad 5.5v capacitor | # H01-CEZXA0479MN-5 |
| AVR8000 | C726 | Front PCB | 0.047 Farad 5.5v capacitor | # 55230310NR or # P10790-ND |
| AVR100/200 | C412 | Front PCB | 0.047 Farad 5.5v capacitor | # CEGT-B473J-0J0 |
| AVR300 | C906 | Front PCB | 0.1Farad 5.5v capacitor | # J4433210421X or # P10791-ND |
| AVR500 | C906 | Front PCB | 0.1Farad 5.5v capacitor | # J4433210421X or # P10791-ND |
| AVR110/210/310/510 AVR120/220/320/520 | C216 | Front PCB | 0.047 Farad 5.5v capacitor | # P10790-ND |
| AVR125/225 | C734,C885 | Front PCB | two 0.1F capacitors in parallel | # BCESOHD104 |
| AVR325/525 | C106 | Front PCB | 0.047 Farad 5.5v capacitor | # P10790-ND |
| AVR130/230/330 | BAT1 | Front PCB | 3.6v Battery | # HABGP40BVH3A3H |
| AVR135/235/335 | BAT1 | Front PCB | 3.6v Battery | # HGP15BNH3A3H |
| AVR430/630 | C657 | DSP PCB | 0.047 Farad 5.5v capacitor | # CEZXA0479MN-5 |
| AVR435/635 | C557 | DSP PCB | 0.047 Farad 5.5v capacitor | # H03-CEZXA0479MN-0 |
| DPR1001 | BC601 | Main PCB | 0.1Farad 5.5v capacitor | # CEGT-B104J-0J0 |
| DPR1005/2005 | C437 | Processor PCB | 0.047 Farad 5.5v capacitor | # CEZXA0479MN-5 |
| HK3370/3470 | C301 | Front PCB | 0.1Farad 5.5v capacitor | # CEGT-B104J-0J0 |
| HK3375/3475 | C301 | Front PCB | 0.1Farad 5.5v capacitor | # CEGT-B104J-0J0 |
| HK3250 | C712 D709 | Front PCB | 0.047 Farad 5.5v capacitor and 1N4148 diode | #3439247315 #2058322101 |

* After approximately two weeks of being disconnected from AC supply, even a normally functioning receiver may lose any programmed settings and switch to default settings. (Four weeks for the DPR1005 & 2005)

BLOCK DIAGRAM AVR 430/630





AVR430/630 EXPLODED VIEW PARTS LIST

| Ref# | Description | Part Number | Qty |
|------|--|--------------------|-----|
| 1 | WINDOW DISPLAY AVR630 | H01-ZPC1119GABT-A | 1 |
| | WINDOW DISPLAY AVR430 | H01-ZPC1022GABT-3 | 1 |
| 2 | CAP KNOB VOLUME AVR630 | H01-ZPC1020GACR-2 | 1 |
| 3 | COVER KNOB VOLUME AVR430/630 | H01-ZPC1021GASG-4 | 1 |
| 4 | FILTER DISPLAY AVR430/630 | H01-ZPC1018GART-7 | 1 |
| 5 | AL DOOR AVR430/630 | H01-ZMC11S00200-0 | 1 |
| 6 | AL PANEL AVR430/630 | H01-ZMC11S00300-2 | 1 |
| 7 | Not Used | | |
| 8 | BKT HINGE AVR430/630 | H01-ZMC11S04A00-1 | 2 |
| 9 | DOOR AVR430/630 | ZPC1002GAGY-9 | 1 |
| 10 | PANEL FRONT AVR430/630 | ZPC1101GBGY-5 | 1 |
| 11 | CAP BUTTON STAND-BY AVR430/630 | H01-ZMC11S12A00-8 | 1 |
| 12 | INDICATOR STAND-BY | ZPC1007GAMW-9 | 1 |
| 13 | BUTTON POWER | ZPC1003GAGY-5 | 1 |
| 14 | BUTTON STANDBY | ZPC1006GAWH-0 | 1 |
| 15 | SW PUSH POWER SDDLBB15700 | H01-SWA2B221PDAA-7 | 1 |
| 16 | BKT HEADPHONE | H01-ZMB01S00100-5 | 1 |
| 17 | JACK PHONE 6.35 H70980110S 9P BK | H01-SOSS9CKX3NN-9 | 1 |
| 18 | FL HCA-18LL03 | H01-VDHCA18LL03-7 | 3 |
| 19 | INDICATOR VIDEO | ZPC1102GAMW-1 | 2 |
| 20 | BUTTON 8 KEY | ZPC1005GAGY-8 | 1 |
| 21 | BADGE AL HARMAN/KARDON SILVER | H01-ZMC12S20A00-2 | 1 |
| 22 | IC-REMOTE TORX179 FIBER OPTIC RECEIVER SHUTTER TYPE | n/a | 4 |
| 23 | JACK RCA 1P JE010003MN GND OR | H01-SORA1JE01NN-0 | 1 |
| 24 | AC PUN SHIELD DIGITAL ET | H01-ZMC12S17A00-0 | 1 |
| 25 | BUTTON 7 KEY | H01-ZPC1004GASG-0 | 1 |
| 26 | RUBBER FOOT 19.7X19.7X2T BK | ZFNR19720SB-5 | 4 |
| 27 | FOOT 50MM 15.8MM | ZPC1103GAGY-A | 4 |
| 28 | CHASSIS MAIN AVR430/630 | n/a | 1 |
| 29 | CON DIN SCKT SOCKET CONNECTOR SVHS EST-S408J | H01-SORA8OSC5N8-2 | 1 |
| 30 | SWIROT EC16B24204 5V 500U0A 10T 3P 0 0 | H01-SWE3A0505S1-9 | 1 |
| 31 | HOLDER VFD AVR430/630 | ZPC1017GABK-6 | 1 |
| 32 | IC-REMOTE RPM6938-RSIP-A3 RECEIVER 38KHZ- | H01-ICRPM6938NN-3 | 1 |
| 33 | CHASSIS FRONT AVR430/630- | n/a | 1 |
| 34 | MN X'FORMER AVR630 120V- | H01-TXPWM630B0-4 | 1 |
| 35 | BKT TRANS BOTTOM- | H01-ZMC12S08B00-5 | 1 |
| 36 | BKT FAN FRONT AVR430/630- | H01-ZMC11S09A00-6 | 1 |
| 37 | FAN JF0925S1L | H01-ZVC11FAN100-6 | 1 |
| 38 | BKT FRAME GUIDE | H01-ZMC11S04B00-3 | 2 |
| 39 | STANDOFF HEX M4X0.7 6X61.9H | ZMC12S14AYE-9 | 3 |
| 40 | H/SINK REG 118*20* | n/a | 1 |
| 41 | CON PHONO SCKT RCA 4P JW-4104RSA | H01-SORA40RSANN-6 | 1 |
| 42 | CON PHONO SCKT RCA 4P JW-4104RSC | H01-SORA40GNDNN-7 | 1 |
| 43 | JACK-TELE SNAP-IN GOLDEN TELECOM GDL1-8P8C 8T BK 0 0 | n/a | 1 |
| 44 | CONN-SPE TERMINAL SPKR 8P SH081136JP FE 19MM 8 -- 0 0- | H01-SOPA81900NN-8 | 1 |
| 45 | STANDOFF HEX M4X0.7 6X31.9H | ZMC12S13AYE-1 | 3 |
| 46 | CON PHONO SCKT RCA 4P JW4104RS GND | H01-SORA40RSANN-6 | 5 |
| 47 | TUNER MODULE KST-MB011MW0-80 US | H01-ZVC11TUNE01-7 | 1 |
| 48 | H/SINK MAIN AVR630 | n/a | 1 |
| 49 | AC HEATSINK 17*15*30 AVR430/630 - ME- | n/a | 1 |
| 50 | STANDOFF HEX M4X0.7 6X111.2H | ZMC12S15AYE-6 | 1 |
| 51 | BKT INLET | H01-ZMC12S19A00-2 | 2 |
| 52 | CON MAINS INLET A/C INLET 7014-NGP | H01-SOXA27014NN-9 | 1 |
| 53 | CONN-SPE AC OUTLET 2P 110V FE 12.75MM 2 BK 0 0 | H01-SOPA21275BK-3 | 1 |
| 54 | H/SINK AMP AVR630 | n/a | 1 |
| | H/SINK AMP AVR430 | n/a | 1 |
| 55 | BKT HEATSINK | n/a | 6 |
| 56 | CONN-SPE TERMINAL SPKR 6P SH0611708P FE 19MM 6 BK 0 0 | H01-SOPA619BKNN-7 | 1 |
| 57 | JACK D-SUB 9P 87204-6063 W/DUST COVER BK | SOPA96063NN-0 | 1 |

| | | | |
|----|--|-------------------|----|
| 58 | JACK PHONE 3.6 EP-1401A 1P BK | H01-SOJW2350SNN-A | 3 |
| 59 | AC PUN BRACKET BKT GROUND ET 0.5T AVR520 | H01-ZMC12S16A00-A | 1 |
| 60 | BKT FAN REAR AVR430/630 | H01-ZMC11S10A00-6 | 1 |
| 61 | CON PHONO SCKT RCA 2P W/GND CAP JW-1502SN OO | H01-SORA21502NN-2 | 1 |
| 62 | KNOB VOLUME AVR630 | ZPC1016GAMW-8 | 1 |
| 63 | CON PHONO SCKT RCA 1P W/GND JE010003LN OG | H01-SORA103LNNN-5 | 1 |
| 64 | JACK RCA+S VIDEO CC5016031DN GND CAP Y | H01-SORA11Y00NN-5 | 7 |
| 65 | PANEL REAR AVR630 | H01-ZMC11S11A00-7 | 1 |
| | PANEL REAR AVR430 | H01-ZMC10S01A00-0 | 1 |
| 66 | COVER TOP AVR430/630 | H01-ZMC11S08A00-5 | 1 |
| 67 | BADGE MOLD HARMAN/KARDON H/STAMPING SILVER | H01-ZPC1104GAGY-1 | 1 |
| 68 | Not Used | | |
| 69 | COVER BOTTOM- | n/a | 1 |
| 70 | AC METAL STANDOFF HEX MF M4X8 6MMOD 31.9H | ZMC12S13AYE-1 | 4 |
| 71 | DAMPER GEAR | H01-ZVC11GEAR01-A | 1 |
| 72 | BRACKET DOOR- | H01-ZMC11S14A00-A | 1 |
| 73 | JACK RCA 9P FRDCAP RDX3,BUX3,GNX3 | H01-SORA90GNDNN-8 | 1 |
| 74 | CON PHONO SCKT RCA-313P 3 PIN | H01-SORA3313PNN-3 | 1 |
| | | | |
| S1 | SCREW ST BH 3X10 | ZS-TBM-3010-BB | 64 |
| S2 | SCREW ST WPH 3X8 | ZS-TWM-3008-BY | 40 |
| S3 | SCREW BM 4X10 | ZS-MCM-4010-BB | 4 |
| S4 | SCREW ST WPH 4X8 | ZS-TWM-4008-BB | 12 |
| S5 | SCREW ST WPH 3X6 | ZS-TWM-3006-BB | 5 |
| S6 | SCREW ST BH 3X8 | ZS-TBM-3008-BY | 1 |
| S7 | SCREW ST BH 3X12 PIVOT | ZS-TBM-3012-BY | 35 |
| S8 | SCREW BM 4X8 | ZS-MCM-4008-BY | 5 |
| SG | SCREW ST BH 3X10 GROUND | ZS-TGM-3010-BB | 46 |
| SF | SCREW ST BH 5X10 | ZS-TBM-5010-BB | 4 |
| N1 | NUT M4 HEXAGON CIRCULAR EXTERNAL | ZN-SSM-4045-HZ | 4 |
| W1 | WASHER SPRING 3 | ZW-M62-3108-SZ | 35 |
| W2 | WASHER PLAIN 3 | ZW-M80-3305-PZ | 14 |
| W3 | AC SPRING WASHER RT2250(PAV5005) | ZW-M76-3109-SZ | 8 |
| W4 | WASHER PLAIN 4 | ZW-MC0-4810-PZ | 4 |
| W5 | WASHER FIBER 3 0.8T | ZW-F79-3008-PO | 4 |

AVR-630 PART LIST

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|---------|----------------------------|---|------|
| | 3SA-3072US-BC00-1-3 | AC MECH BOM AVR630 HARMAN OEM | |
| | H01-FBB0102AA00-7 | FCORE FERRIT MAGNET SRH9. 9X20. 0X5. 1+CASE W5 | |
| | H01-SWA2B21PDA&-7 | SW PUSH POWER SDDLB15700 | |
| | H01-TXPWM630B0-4 | MN X'FORMER AVR630 120V | BK |
| | H01-TXPWMMD02B0-A | MN X'FORMER AVR630EU 230V | IB |
| | H01-WF19N2605FU-9 | FFC-JUMPER 19X 1.25MM 260MM | |
| | H01-WF23N2705FU-A | FFC-JUMPER 23X 1.25MM 270MM | |
| | H01-WF4261805BN-1 | WIRECONASY DL 2.0MM 4P 180MM UL 1007 RIBBON 26 1 | |
| | H01-WF9262205BN-3 | WIRECONASY DL 2.0MM 9P 220MM UL 1007 RIBBON 26 1 | |
| | H01-WG03SE85300-0 | WIRECONASY DL 3.96MM 2P 530MM UL1007 RIBBON 16 1 | |
| | XY1N055M0DW-7 | GLUE TAPE , W=10MM L=55M DOUBLE-SIDE ,WHITE,#3M9495LE. @M | |
| | XY1N209M0DW-4 | GLUE TAPE W=12MM L=9.0M DS WHITE @ROLL | |
| | XY1N218M3SW-4 | GLUE FURROW W=12MML=18.3M SS WHITE @ROLL | |
| | XY1N250M0CL-5 | GLUE,TRANSPARENT,CANDY STRIP,W=12MM,L=50M @M | |
| | XY1N250M0DW-4 | GLUE,TAPE,#9070,W=12MM,L=50,DOUBLE-SIDE,WHITE. @METER | |
| | XY2N450M0DW-6 | GLUE,TAPE,#9070,W=24MM,L=50,DOUBLE-SIDE,WHITE. @METER | |
| | XY501110CRD-2 | GLUE, RED #AK-501 F/SCREW V=110CC @BOTT | |
| | XYALC01G000-2 | ALCOHOL V=1.0GALLON @GALLON | |
| | XYEM501K000-2 | SPECIALTY LUBRICANTS GREASE,#EM-50L,W=1KG @G | |
| | XYGLAA5K200-3 | GLASS CLEANER,N.W=0.52KG @BOTT | |
| | XYKIFA4L500-1 | KIF VEG LIQUID CAR WAX,V=0.445 L @BOTTLE | |
| | XYVAS00K500-6 | VASOGEN,YELLOW,N.W=0.5KG @BOTT | |
| | ZFNR12062SB-8 | RUBBER SIDE | |
| | ZFNR12072SB-5 | RUBBER SIDE | |
| | ZFNR13830SB-6 | RUBBER SIDE | |
| | ZFNR19720SB-5 | RUBBER FOOT 19.7X19.7X2T BK | |
| | ZKC1130HA00-0 | LABEL SERIAL AVR630 | BK |
| | ZKD0230HA00-4 | LABEL SERIAL AVR630EU | IB |
| | ZKC1173HA00-1 | LABEL BARCODE AVR630 | BK |
| | ZKD0273HA00-5 | LABEL BARCODE AVR630EU | IB |
| | ZKC1195HA00-5 | LABEL LICENSE AVR630 | |
| | ZKC1222HA00-2 | LABEL RISK | |
| | ZKC1229HA00-7 | LABEL DATE | |
| | ZKC1281HA00-9 | LABEL QC CHECK | |
| | ZKGEN29HA00-8 | LABEL DATE BLANK | |
| | ZKGEN30HA00-6 | LABEL SERIAL BLANK | |
| | ZKGEN73HA00-7 | LABEL BARCODE BLANK | |
| | ZKGEN97HA00-3 | LABEL MAIN POWER REMIND | |
| | H01-ZMB01S00100-5 | BKT HEADPHONE JACK | |
| | H01-ZMB01S02200-9 | SPRING PLATE GND C5212 0.2T | |
| | H01-ZMC11HS0100-5 | H/SINK AMP AVR630 | |
| | H01-ZMC11HS0200-7 | H/SINK MAIN AVR630 | |
| | H01-ZMC11S00200-0 | AL DOOR AVR430/630 | |
| | H01-ZMC11S00300-2 | AL PANEL AVR430/630 | |
| | H01-ZMC11S04A00-1 | BKT HINGE AVR430/630 LEFT | |
| | H01-ZMC11S04B00-3 | BKT FRAME GUIDE | |
| | H01-ZMC11S05B00-4 | BKT HINGE AVR430/630 RIGHT | |
| | H01-ZMC11S06A00-3 | SPRING STOPPER AVR430/630 | |
| | H01-ZMC11S07A00-4 | CHASSIS FRONT AVR430/630 | |
| | H01-ZMC11S08A00-5 | COVER TOP AVR430/630 | |
| | H01-ZMC11S09A00-6 | BKT FAN FRONT AVR430/630 | |
| | H01-ZMC11S10A00-6 | BKT FAN REAR AVR430/630 | |
| | H01-ZMC11S11A00-7 | PANEL REAR AVR630 | BK |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|---------|-------------------|--|------|
| | H01-ZMD02S11A00-4 | PANEL REAR AVR630EU | IB |
| | H01-ZMC11S12A00-8 | CAP BUTTON STAND-BY AVR430/630 | |
| | H01-ZMC11S13A00-9 | CHASSIS MAIN AVR430/630 | |
| | H01-ZMC11S14A00-A | BRACKET DOOR | |
| | H01-ZMC12S07A00-2 | COVER BOTTOM | |
| | H01-ZMC12S08B00-5 | BKT TRANS BOTTOM | |
| | H01-ZMC12S09A00-4 | BKT HEATSINK | |
| | ZMC12S13AYE-1 | STANOFF HEX M4X0.7 6X31.9H | |
| | ZMC12S14AYE-9 | STANOFF HEX M4X0.7 6X61.9H | |
| | ZMC12S15AYE-6 | STANOFF HEX M4X0.7 6X111.2H | |
| | H01-ZMC12S19A00-2 | BKT AC INLET | |
| | H01-ZMC12S20A00-2 | BADGE AL HARMAN/KARDON SILVER | |
| | ZNSSM4045HZ-4 | NUT M4 HEXAGON CIRCULAR EXTERNAL | |
| | ZPC1002GAGY-9 | DOOR AVR430/630 | |
| | ZPC1003GAGY-5 | BUTTON POWER | |
| | H01-ZPC1004GASG-0 | BUTTON 7 KEY | BK |
| | H01-ZPD0104GASG-8 | BUTTON 7 KEY EU | IB |
| | ZPC1005GAGY-8 | BUTTON 8 KEY | |
| | ZPC1006GAWH-0 | BUTTON STANDBY | |
| | ZPC1007GAMW-9 | INDICATOR STAND-BY | |
| | ZPC1016GAMW-8 | KNOB VOLUME AVR630 | |
| | ZPC1017GABK-6 | HOLDER VFD AVR430/630 | |
| | H01-ZPC1018GART-7 | FILTER VFD | |
| | H01-ZPC1020GACR-2 | CAP KNOB VOLUME AVR630 | |
| | H01-ZPC1021GASG-4 | COVER KNOB VOLUME AVR430/630 | |
| | ZPC1101GBGY-5 | PANEL FRONT AVR630 | BK |
| | ZPD0201GBGY-9 | PANEL FRONT AVR630EU | IB |
| | ZPC1102GAMW-1 | INDICATOR VIDEO 4 | |
| | ZPC1103GAGY-A | FOOT 50MM 15.8MM | |
| | H01-ZPC1104GAGY-1 | BADGE MOLD HARMAN/KARDON H/STAMPING SILVER | |
| | H01-ZPC1119GABT-A | WINDOW DISPLAY AVR630 | |
| | ZSMCM4008BY-1 | SCREW BM 4X8 | |
| | ZSMCM4010BB-5 | SCREW BM 4X10 | |
| | ZSTBM3008BY-1 | SCREW ST BH 3X8 | |
| | ZSTBM3010BB-5 | SCREW ST BH 3X10 | |
| | ZSTBM3012BY-A | SCREW ST BH 3X12 PIVOT | |
| | ZSTGM3010BB-3 | SCREW ST BH 3X10 GROUND | |
| | ZSTWM3006BB-3 | SCREW ST WPH 3X6 | |
| | ZSTWM3008BY-8 | SCREW ST WPH 3X8 | |
| | ZSTWM3A08BY-6 | SCREW ST W7.5PH 3X8 | |
| | ZSTWM4008BC-3 | SCREW ST WPH 4X8 SILVER CHROM | |
| | ZTB017030AA-4 | CABLE TIE 100MM NYLON 6 | |
| | ZUC1201AABK-7 | SPONGE 30X30X10T BK | |
| | ZV4P00030TH-3 | HEAT SHRINK TUBE L30MM*D4.0MM*T0.5MM | |
| | H01-ZVC11DWT100-3 | TAPE DOOR | |
| | H01-ZVC11DWT200-5 | TAPE PANEL | |
| | H01-ZVC11FAN100-6 | FAN JF0925S1L | |
| | ZVC11FILM0A-A | PROTECTION FILM | |
| | ZVC11FLT100-9 | FELT COVER PANEL | |
| | ZVC11FLT200-7 | FELT COVER KNOB | |
| | H01-ZVC11GEAR01-A | DAMPER GEAR DP120 | |
| | H01-ZVC11TUNE01-7 | TUNER MODULE KST-MB011MW0-81 US | BK |
| | H01-ZVD01TUNE00-2 | TUNER MODULE KST-MB114MW1-81 OEM EU | IB |
| | ZWF793008PO-5 | WASHER FIBER 3 0.8T | |
| | ZWM623108SZ-2 | WASHER SPRING 3 | |
| | ZWM763109SZ-2 | AC SPRING WASHER RT2250(PAV5005) | |
| | ZWM803305PZ-1 | WASHER PLAIN 3 | |
| | ZWMC04810PZ-5 | WASHER PLAIN 4 | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|-----------------|----------------------------|--|------|
| | 3SA-3072US-DGMI-1-2 | AC EMBD IMA DSP BD AVR630 | |
| C657 | PBC11KDGB21-0 | AVR630 DSP DUAL PCB 209MM*170MM | |
| IC601 | CEZXA0479MN-5 | CM 47M10F +80% -20% 5.5V 70C | |
| T701 | H01-ICKA78R08I2-4 | IC-KA78R08API TO-220IS-4PIN | |
| T700 | H01-LF11030A2NA-4 | TFPULSE TRANSFORMER 110UH FP-110 FERRIT MAGNET | |
| T700 | H01-LF110P110NA-8 | TFPULSE TRANSFORMER 110UH FP-120 FERRIT MAGNET | |
| Y800 | H01-OSCEM24M5RU-A | VCXO 24M576 HZ +50 PPM -50 PPM 0 OHM 3.3V | |
| Y600 | H01-OSCNI20MOCU-6 | CSTLS20MOX51-B0 | |
| | RC3DI022AIN-2 | RCF 2R2 OHM +5% 250M10W | |
| | RC3DI033AIN-6 | RCF 3R3 OHM +5% 250M10W | |
| SK700 | H01-RLL0516632B-A | RELAYPWR 5.0V 166.0OHM 1.0A 24.0V | |
| NJ4 | H01-SORA103LNNN-5 | CON PHONO SCKT RCA 1P W/GND JE010003LN OG | |
| NJ5 | H01-SORA21502NN-2 | CON PHONO SCKT RCA 2P W/GNDCAP JW-1502SN OO | |
| NJ72 | H01-SORA40RSANN-6 | JACK RCA 4P JB040131ZN GN BN PP TA | |
| NJ71 | H01-SORA40RSCNN-A | JACK RCA 4P JB040131QN WH BU RD GY | |
| NJ74 75 | H01-SOTOR179LBA-0 | D-LEM TORX-179L | |
| NJ76 | H01-SOTOT179LBA-7 | D-LEM TOTX-179L | |
| REWORK | H01-WC1181505C1-8 | WCL 150-05-05 UL1007 HOOK-UP 18 150MM BK 5 5 | |
| REWORK | H01-WC1260405C1-1 | WCL 040-05-05 UL1007 HOOK-UP 26 040MM BK 5 5 | |
| REWORK | H01-WC1260705C1-6 | WCL 070-05-05 UL1007 HOOK-UP 26 070MM BK 5 5 | |
| REWORK | H01-WC1261155C1-0 | WCL 115-05-05 UL1007 HOOK-UP 26 115MM BK 5 5 | |
| W3~W3-1 W4~W4-1 | H01-WC1261305C1-2 | WCL 130-05-05 UL1007 HOOK-UP 26 130MM BK 5 5 | |
| N405 | H01-WG06SB83000-8 | CNT ASSY 2.0MM 6P 300MM RIBBON 26AWG UL1007 | |
| P1 | H01-WN05SB00000-0 | CONN 2.0MM 5 MA ST NAT GT201-5P-TS | |
| N408 | H01-WN06AB00001-4 | CNT PLUG BD'BD SOCKET 2.0mm 35237-0610 | |
| P403 | H01-WN09SB00000-A | CONN 2.0MM 9 MA ST NAT GT201-9P-TS | |
| N407 | H01-WN11SB00000-8 | CONN 2.0MM 11P MA ST NAT MOLEX 35336-1110 0 0 | |
| N404 | H01-WN17SB00000-1 | CONN 2.0MM 17 MA ST NAT MOLEX 35336-1710 0 0 | |
| N403 | H01-WN19AB00000-9 | CONN 2.0MM 19 MA R NAT SOCKET MOLEX 35237-1910 0 0 | |
| N401 | H01-WN19SB00000-6 | CONN 2.0MM 19 MA ST NAT MOLEX 35336-1910 0 0 | |
| N406 | H01-WN23AI000WH-9 | CONN 1.25MM 23 FE ANG WH GF120-23S-LS 2794 A6 | |
| | XY0N618M3SW-A | GLUE FURROW W=6MM L=18.3M SS WHITE @ROLL | |
| | XY0P801K000-A | WIRE TIN D=0.8MM N.W=1.0KG @KG | |
| | XY1N209M0DW-4 | GLUE TAPE W=12MM L=9.0M DS WHITE @ROLL | |
| | XY1N218M3SW-4 | GLUE FURROW W=12MML=18.3M SS WHITE @ROLL | |
| | XY1P202K000-1 | WIRE, TIN, D=1.2MM N.W=2.0KG @KG | |
| | XY30155G00-0 | TCE,CLEANER,-301#,V=55GALLON,TYPELESS @GALLON | |
| | XY4N836M5CL-9 | GLUE TRANSPARENT W=48MM L=36.5M @ROLL | |
| | XY6R301K000-0 | BAR,TIN,63/37,N.W=1.0KG @KG | |
| | XYALC01G000-2 | ALCOHOL V=1.0GALLON @GALLON | |
| | XYGLU00K5RD-7 | GLUE, RED, W=0.5KG TYPELESS FOR SMT @KG | |
| | XYJUI00K5GY-5 | JUICE TIN N=0.5KG GREY @KG | |
| | XYRF801G000-7 | FLUX #RF-800 V=1.0 GALLON @ GALLON | |
| | XYWAX10K000-6 | ANTI-OXIDATION,WAX,W-1#,N.W=10KG,@KG | |
| | 3SA-3072US-DGAA-1-0 | AC ESABD IAA TOP DSP BD AVR630 | |
| L600 | H01-LAINB047ACR-3 | LF 4U7H +10% 1.7 OHM 190.0A | |
| R619 | RC3DI010AIN-1 | RCF 1R0 OHM +5% 250M10W | |
| | 3SA-3072US-DGAR-1-2 | AC ESABD TOP IAR DSP BD AVR630 | |
| C472 473 474 | CEHDC0108NN-3 | CE 1M10F +20% 6.3V 8X11.5 85C | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|--|---|---|------|
| C126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 231 232 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 456 457 458 459 460 461 462 463 464 465 613 620 621 727 729 731 733 735 | CEHFC0106MN-5 | CE 10U0F 16.0V 5X11 P2.5MM | |
| C150 151 152 153 233 470 471 618 630 723 800 807 811 820 822 828 830 | CEHFC0107MN-3 | CAP ELEC 100U0F 16.0V M 5X11 P2.5MM | |
| C211 212 213 214 627 C619 C203 204 205 206 207 208 209 210 223 224 225 226 227 228 229 230 | CEHFC0476MN-5 CEHIC0104MN-A CEHIC0105NN-7 | CE 47U0F +20% 16.0V 5X11 P2.5MM CE 100N0F +20% 50.0V 85C SSE TYPE CE 1U0F +20% 50.0V 5X11 85C | |
| C806 C725 Q611 | CEHIC0225NN-8 CEHIC0475NN-7 H01-TRMPSA06NNA-4 | CE 2U2F +20% 50.0V 85C 2.5MM CE 4U7F +20% 50.0V 85C TR-SLPLF MPSA06 N 500MI0A TO-92 | |
| 3SA-3072US-DGSB-1-3 | | AC ESABD SMD BOT DSP BD AVR630 | |
| C606 608 611 615 C432 433 444 445 C434 435 436 437 438 439 440 441 442 443 446 447 | CZJII0101BE-2 CZJII0471BE-2 CZJII0561CE-0 | CCCFMIC 100P0F +5% -5% 50.0V NP0 CCCFMIC 470P0F +5% -5% 50.0V NP0 CCCFMIN 560P0F +5% -5% 50.0V NP0 0805 | |
| C721 C709 711 716 997 998 C416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 | CZKII0102BC-7 CZKII0103BC-5 CZKII0272BC-4 | CCCFMIC 1N0F +10% -10% 50.0V X7R CCCFMIC 10N0F +10% -10% 50.0V X7R CCCFMIC 2N7F +10% -10% 50.0V X7R | |
| C116 117 118 119 120 121 122 123 124 125 154 155 156 157 158 159 160 161 162 163 164 165 167 168 169 170 171 172 173 174 191 192 193 194 195 196 197 198 199 200 201 202 215 216 217 218 219 220 221 222 468 469 612 614 617 622 624 628 705 707 708 710 715 719 722 724 726 728 730 732 734 742 801 802 808 809 810 814 815 816 818 819 821 829 | CZZFI0104BF-8 | CCCFMIC 100N0F +80% -20% 16.0V Y5V | |
| C720 D400 401 600 601 604 651 700 | CZZII0223BF-1 H01-DS1S50094NB-A | CCCFMIC 22N0F +80% -20% 50.0V Y5V 0603 D-SLP 1SS355 35.0V 225MI0A | |
| L1 100 101 102 103 104 105 106 107 108 109 110 111 700 701 704 803 R728 880 | H01-FB2K52012NN-5 | FBEAD SURFACE MT 2500OHM FCM2012H-252T02 | |
| L707 708 R6 7 8 | H01-FB3002012NN-4 RS3AD0000NA-0 | FBEAD SURFACE MT 300OHM FCM2012V-301T07 RMGCFMIC 0 OHM +0% 62MI5W | |
| R708 731 733 734 745 R632 711 730 732 R631 712 713 | RS3AD0100NA-7 RS3AD0101NA-5 RS3AD0102NA-3 | RMGCFMIC 10R0 OHM +5% 62MI5W RMGCFMIC 100R0 OHM +5% 62MI5W RMGCFMIC 1K0 OHM +5% 62MI5W | |
| R180 181 182 183 184 185 186 187 5 R116 117 118 119 120 121 122 123 140 141 142 143 144 145 146 147 448 449 450 451 452 453 454 455 470 471 | RS3AD0103NA-1 RS3AD0104NA-A | RMGCFMIC 10K0 OHM +5% 62MI5W RMGCFMIC 100K0 OHM +5% 62MI5W | |
| R416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 | RS3AD0122NA-8 | RMGCFMIC 1K2 OHM +5% 62MI5W | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|---|--------------------|--|------|
| R132 133 134 135 136 137 138 139 196 197 198 199 200 201 202 203 | RS3AD0151NA-1 | RMGCFMIC 150R0 OHM +5% 62MI5W | |
| R657 | RS3AD0200NA-3 | RES,CHIP 20 OHM 1/16W +/-5% 0603 | |
| R716 | RS3AD0220NA-8 | RMGCFMIC 22R0 OHM +5% 62MI5W | |
| R729 804 | RS3AD0221NA-6 | RMGCFMIC 220R0 OHM +5% 62MI5W | |
| R744 876 877 878 | RS3AD0332NA-8 | RMGCFMIC 3K3 OHM +5% 62MI5W | |
| R400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 | RS3AD0432NA-4 | RMGCFMIC 4K3 OHM +5% 62MI5W | |
| R157 166 167 168 169 170 171 526 651 652 653 | RS3AD0472NA-3 | RMGCFMIC 4K7 OHM +5% 62MI5W | |
| R148 149 150 151 152 153 154 155 623 | RS3AD0473NA-1 | RMGCFMIC 47K0 OHM +5% 62MI5W | |
| R456 457 458 459 460 461 462 463 | RS3AD0561NA-4 | RMGCFMIC 560R0 OHM +5% 62MI5W | |
| R432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 | RS3AD0562NA-2 | RMGCFMIC 5K6 OHM +5% 62MI5W | |
| R710 | RS3AD0621NA-1 | RMGCFMIC 620R0 OHM +5% 62MI5W | |
| R709 | RS3AD0681NA-5 | RMGCFMIC 680R0 OHM +5% 62MI5W | |
| NJ13 14 | RS3AY0103NA-7 | RCA 10K0 OHM +5% 62M15W 4 | |
| NJ15 16 | RS3AY0332NA-3 | RCA 3K3 OHM +5% 62M15W 4 | |
| L800 JUM5 6 7 11 12 13 14 15 16 17 18 19 20 | RS3BB0000NA-5 | RMGCFMIN 0 OHM +5% 100MI0W 0805 | |
| Q402 403 | H01-TRDTA114YNI-9 | TR-SSD DTA114YKA P 10K0 OHM 47K0 OHM | |
| Q600 601 604 605 606 607 608 609 612 613 700 | H01-TRDTC114YNI-5 | TR-SSD DTC114YKA N 10K0 OHM 47K0 OHM | |
| Q400 401 | H01-TRKTD1304ND-5 | TR-SLPSWA KTD1304 N 20V 300MI0A SOT-23 | |
| 3SA-3072US-DGST-1-9 | | AC ESABD TOP SMD DSP BD AVR630 | |
| C100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 142 143 144 145 146 147 148 149 175 176 177 178 179 180 181 182 235 236 237 238 616 625 626 | CZJII0101BE-2 | CCCFMIC 100P0F +5% -5% 50.0V NP0 | |
| C700 702 743 | CZJII0220BE-5 | CCCFMIC 22P0F +5% -5% 50.0V NP0 | |
| C853 | CZJII0221BE-3 | CCCFMIC 220P0F +5% -5% 50.0V NP0 | |
| C491 492 493 494 | CZJII0470BE-4 | CCCFMIC 47P0F +5% -5% 50.0V NPO 0603 | |
| C851 | CZJII0471BE-2 | CCCFMIC 470P0F +5% -5% 50.0V NP0 | |
| C183 184 185 186 187 188 189 190 243 244 | CZKII0102BC-7 | CCCFMIC 1N0F +10% -10% 50.0V X7R | |
| C703 706 717 | CZKII0103BC-5 | CCCFMIC 10N0F +10% -10% 50.0V X7R | |
| C804 | CZKII0122BC-1 | CCCFMIC 1N2F +10% -10% 50.0V X7R | |
| C466 467 | CZKII0561BC-8 | CCCFMIC 560P0F +10% -10% 50.0V X7R | |
| C805 | CZKII0680BE-7 | CCCFMIC 68P0F +10% -10% 50.0V NP0 | |
| C234 239 240 241 242 448 449 450 451 452 453 454 455 629 714 718 803 891 899 | CZZFI0104BF-8 | CCCFMIC 100N0F +80% -20% 16.0V Y5V | |
| D603 605 606 | H01-DS1S50094NB-A | D-SLP 1SS355 35.0V 225MI0A | |
| L703 802 804 805 R879 | H01-FB2K52012NN-5 | FBEAD SURFACE MT 2500OHM FCM2012H-252T02 | |
| L705 R735 | H01-FB3002012NN-4 | FBEAD SURFACE MT 300OHM FCM2012V-301T07 | |
| IC804 | H01-IC49L8192I5-A | IC-FLASH MEMORY ROM AT49LV8192A 70ns | |
| IC801 | H01-IC74V244MG5-3 | IC-LOGIC 74VHCT244A INVERTER CMOS | |
| IC802 | H01-IC74VC244G5-6 | IC-LOGIC 74VHC244A INVERTER CMOS | |
| IC602 | H01-ICBU4094BD3-2 | IC CMOS BU4094BF SOP16 | |
| IC700 | H01-ICCS42528EC-0 | IC-CODEC CS42528CQ | |
| IC800 | H01-ICCS49400ED-3 | IC-DSP CS494003-CQ LQFP144 | |
| IC112 113 114 115 | H01-ICCS5361KG4-0 | IC-CONV CS5361-KZ A/D TSSOP24 | |
| IC600 | H01-ICD703033EL-56 | IC-MICOM FLASH NEC UPD70F3033BGF 0228KK001 JAPAN QFP100 | |
| IC805 | H01-ICK4S1616M6-9 | IC-SDRAM K4S161622E-TC70 OR TC80 | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|--|-------------------|--|------|
| IC100 101 102 103 104 105 106 107 108 109 110 111 116 117 400 401 402 403 404 | H01-ICLM02068D2-A | IC-OPERAMP NJM2068M DUAL SOP8 | |
| IC603 | H01-ICM24C04WD2-1 | IC-EEPROM M24C04WMN6T | |
| IC701 702 | H01-ICM74H04MD4-2 | IC-LOGIC M74HCU04M1R INVERTER HCT | |
| IC803 | H01-ICNJU6324D2-3 | IC-SPECFUNC NJU6324M SOP8 CMOS CRYSTAL | |
| R600 601 602 603 604 605 719 | RS3AD0100NA-7 | RMGCFMIC 10R0 OHM +5% 62M15W | |
| R715 720 | RS3AD0101NA-5 | RMGCFMIC 100R0 OHM +5% 62M15W | |
| R100 101 102 103 104 106 107 124 125 126 127 128 129 130 131 466 467 472 473 606 607 608 609 610 617 618 626 627 628 629 630 | RS3AD0102NA-3 | RMGCFMIC 1K0 OHM +5% 62M15W | |
| R172 173 174 175 176 177 178 179 188 189 190 191 192 193 194 195 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 238 239 240 241 242 243 611 612 616 621 624 655 656 658 659 802 868 869 871 872 873 874 | RS3AD0103NA-1 | RMGCFMIC 10K0 OHM +5% 62M15W | |
| R654 | RS3AD0103NA-1 | RMGCFMIC 10K0 OHM +5% 62M15W | BK |
| R614 | RS3AD0103NA-1 | RMGCFMIC 10K0 OHM +5% 62M15W | IB |
| R622 702 706 724 | RS3AD0104NA-A | RMGCFMIC 100K0 OHM +5% 62M15W | |
| R464 465 | RS3AD0122NA-8 | RMGCFMIC 1K2 OHM +5% 62M15W | |
| R204 205 206 207 208 209 210 211 244 245 246 247 | RS3AD0151NA-1 | RMGCFMIC 150R0 OHM +5% 62M15W | |
| R156 158 159 160 161 162 163 234 235 527 | RS3AD0203NA-8 | RMGCFMIC 20K0 OHM +5% 62M15W | |
| R746 801 | RS3AD0221NA-6 | RMGCFMIC 220R0 OHM +5% 62M15W | |
| R725 736 738 | RS3AD0222NA-4 | RMGCFMIC 2K2 OHM +5% 62M15W | |
| R108 109 110 111 112 114 115 | RS3AD0223NA-2 | RMGCFMIC 22K0 OHM +5% 62M15W | |
| R901 | RS3AD0270NA-4 | RES,CHIP 27 OHM 1/16W +/-5% 0603 | |
| R870 | RS3AD0302NA-6 | RMGCFMIC 3K0 OHM +5% 62M15W | |
| R2 875 | RS3AD0332NA-8 | RMGCFMIC 3K3 OHM +5% 62M15W | |
| R803 | RS3AD0391NA-3 | RMGCFMIC 390R0 OHM +5% 62M15W | |
| R722 | RS3AD0471NA-5 | RMGCFMIC 470R0 OHM +5% 62M15W | |
| R105 236 237 1 4 625 | RS3AD0472NA-3 | RMGCFMIC 4K7 OHM +5% 62M15W | |
| R232 233 613 620 727 737 739 | RS3AD0473NA-1 | RMGCFMIC 47K0 OHM +5% 62M15W | |
| R721 | RS3AD0511NA-8 | RMGCFMIC 510R0 OHM +5% 62M15W | |
| R468 469 704 726 743 | RS3AD0561NA-4 | RMGCFMIC 560R0 OHM +5% 62M15W | |
| R113 | RS3AD0682NA-3 | RMGCFMIC 6K8 OHM +5% 62M15W | |
| R700 705 723 | RS3AD0750NA-1 | RMGCFMIC 75R0 OHM +5% 62M15W | |
| NJ17 18 19 | RS3AY0103NA-7 | RCA 10K0 OHM +5% 62M15W 4 | |
| NJ1 10 11 2 3 6 7 8 9 | RS3AY0470NA-2 | RCA 47R0 OHM +5% 62M15W 4 | |
| JUM3 4 8 9 10 | RS3BB0000NA-5 | RMGCFMIN 0 OHM +5% 100MI0W 0805 | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|-------------------------------------|----------------------------|--|------|
| | 3SA-3072US-FCMI-1-7 | AC EMBD IMA FRONT BD AVR630 | |
| C131 | PBC11KFCI21-1 | AVR630 FRONT SINGLE PCB 400MM*163MM FR-1 | |
| CA11 | CEHFC0476DH-4 | CE 47U0F +20% 16.0V 85C | |
| D703 704 705 706 707 708 709 710 | CFMVA0104NN-2 | CPPMX 100N0F +20% -20% | |
| D800 | H01-DL30B2015AA-A | D-LEM 30B3-20-15 GaN SUPER BLUE WATER CLEAR 15 | |
| D801 802 | H01-DL3BA05V0BA-2 | D-LEM BLUE/AMBER 3PIE RD RND CL | |
| RM100 | H01-DLRED3FRDBA-5 | D-LEM RED/GREEN 3F RD RND CL | |
| NJ80 | H01-ICRPM6938NN-3 | IC-REMOTE RPM6938-RSIP-A3 RECEIVER 38KHZ | |
| NJ81 | H01-SORA3313PNN-3 | CON PHONO SCKT RCA-313P 3 PINS | |
| NS199 | H01-SORA8OSC5N8-2 | JACK S-VIDEO 1P C40160261N | |
| VR100 | H01-SOXA27014NN-9 | CON MAINS INLET A/C INLET 7014-NGP | |
| DP10 | H01-SWE3A0505S1-9 | SWIROT EC16B24204 5V 500U0A 10T 3P 0 0 | |
| W200 201 | H01-VDHCA18LL03-7 | FL HCA-18LL03 | |
| N101~P101 | H01-WG01S083000-8 | WIRECONASY UNIQUE 1P 300MM UL1007 PVC DISCRETE 22 2 | |
| N104 | H01-WG03AB80900-2 | WIRECONASY DL 2.0MM 03P 90MM ANG UL1007 RIBBON 26 1 B2011HR2 | |
| N102 | H01-WG04SB80900-7 | WIRECONASY DL 2.0MM 04P 90MM UL1007 RIBBON 26 1 | |
| N110 | H01-WG04SB82200-6 | WIRECONASY DL 2.0MM 04P 220MM UL1007 RIBBON 26 1 | |
| P199 | H01-WG07SD84000-4 | WIRECONASY DL 2.5MM 07P 400MM UL1007 RIBBON 24 1 | |
| P104 | H01-WN02SE00000-6 | CON 3.96MM PITCH HEADER 2 POS MOLEX 35328- 0210 | |
| P121 | H01-WN04SB00000-3 | CONN 2.0MM 4 MA ST NAT GT201-4P-TS | |
| P120 | H01-WN11AB00000-0 | CONN 2.0MM 11 MA R NAT SOCKET MOLEX 35237- 1110 0 0 | |
| P123 | H01-WN11SB00000-8 | CONN 2.0MM 11P MA ST NAT MOLEX 35336-1110 0 0 | |
| P105 | H01-WN19AB00000-9 | CONN 2.0MM 19 MA R NAT SOCKET MOLEX 35237- 1910 0 0 | |
| P122 | H01-WN19AI00000-2 | CONN 1.25MM 19 FE ANG WH GF120-19S-LS 2794 A6 | |
| P103 | H01-WN19SB00000-6 | CONN 2.0MM 19 MA ST NAT MOLEX 35336-1910 0 0 | |
| N107 | H01-WN23AI000WH-9 | CONN 1.25MM 23 FE ANG WH GF120-23S-LS 2794 A6 | |
| N103 | H01-WS4264822EN-4 | WIRECONASY DL 2.0MM 04P 480MM UL1533 SHIELD 26 1 2/2 | |
| | XY0N211N5WH-4 | WIRECONASY DL 2.0MM 6P 510MM UL1533 SHIELD 26 1 | |
| | XY0N618M3SW-A | CABLE TIE W=0.2MM L=11.5CM WHITE @ STRIP GLUE FURROW W=6MM L=18.3M SS WHITE @ROLL | |
| | XY0P523K000-A | WIRE,IRON,D=0.5MM,N.W=23KG @KG | |
| | XY0P801K000-A | WIRE TIN D=0.8MM N.W=1.0KG @KG | |
| | XY1N127N0WH-5 | ADHESIVE WHITE D=1.1CM L=27CM @KG | |
| | XY1N209M0DW-4 | GLUE TAPE W=12MM L=9.0M DS WHITE @ROLL | |
| | XY1N218M3SW-4 | GLUE FURROW W=12MM L=18.3M SS WHITE @ROLL | |
| | XY1N250M0DW-4 | GLUE,TAPE,#9070,W=12MM,L=50,DOUBLE- SIDE,WHITE. @METER | |
| | XY1P202K000-1 | WIRE, TIN, D=1.2MM N.W=2.0KG @KG | |
| | XY30155G00-0 | TCE,CLEANER,-301#,V=55GALLON,TYPELESS @GALLON | |
| | XY4N836M5CL-9 | GLUE TRANSPARENT W=48MM L=36.5M @ROLL | |
| 042 | XY6R301K000-0 | BAR,TIN,63/37,N.W=1.0KG @KG | |
| | XYALC01G000-2 | ALCOHOL V=1.0GALLON @GALLON | |
| | XYGLU00K5RD-7 | GLUE, RED, W=0.5KG TYPELESS FOR SMT @KG | |
| | XYRF801G000-7 | FLUX #RF-800 V=1.0 GALLON @ GALLON | |
| | XYWAX10K000-6 | ANTI-OXIDATION,WAX,W-1#,N.W=10KG,@KG | |
| | 3SA-3072US-FCAA-1-5 | AC ESABD IAA FRONT BD AXIAL AVR630 | |
| D101 | H01-DG1N04148NB-4 | D-SLP 1N4148 100.0V 150E-3A | |
| J139 | H01-LAINB0470CR-2 | LF 47U0H +10% 5.8 OHM 500MI0A | |
| L100 | H01-LAINB047ACR-3 | LF 4U7H +10% 1.7 OHM 190.0A | |
| R165 166 167 | RC3DI0103IN-7 | RCF 10K0 OHM +5% 250MI0W | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|---|----------------------------|--|------|
| R802 | RC3DI0221IN-1 | RCF 220R0 OHM +5% 250MI0W | |
| R803 | RC3DI0271IN-8 | RCF 270R0 OHM +5% 250MI0W | |
| R700 701 702 703 | RC3DI0331IN-5 | RCF 330R0 OHM +5% 250MI0W | |
| | 3SA-3072US-FCAR-1-7 | AC ESABD IAR FRONT BD RADIAL AVR630 | |
| C123 | CCZID0104NA-2 | CC 100N0F +80% -20% 50.0V F | |
| C601 | CEHEC0107NN-9 | CE 100U0F +20% 10.0V 5X11 85C | |
| C103 | CEHFC0476DH-4 | CE 47U0F +20% 16.0V 85C | |
| C129 130 | CPIKC0473NN-0 | CPF 47N0F +10% 100.0V | |
| S200 201 202 203 204 205 206 207 208 209 211 212 213 214 215 216 217 218 219 220 | H01-SWC2A112FS1-8 | SWITACT VERTICAL SKQNADD010 12V 50MA | |
| Q100 101 | H01-TRMPSA56YNA-5 | TR-SLPLF MPSA56 Y P -500MI0A -300V | |
| | 3SA-3072US-FCST-1-3 | AC ESABD SMD FRONT BD AVR630 | |
| C111 112 113 115 116 118 119 120 121 | CZJII0101BE-2 | CCCFMIC 100P0F +5% -5% 50.0V NP0 | |
| C220 221 | CZKII0223BC-6 | CCCFMIC 22N0F +10% -10% 50.0V X7R 0603 | |
| C100 101 | CZKII0821BC-8 | CCCFMIC 820P0F +10% -10% 50.0V X7R | |
| C102 110 122 132 200 201 | CZZFI0104BF-8 | CCCFMIC 100N0F +80% -20% 16.0V Y5V | |
| D100 102 103 104 105 200 201 202 203 | H01-DS1S50094NB-A | D-SLP 1SS355 35.0V 225MI0A | |
| IC101 | H01-ICBU4094BD3-2 | IC CMOS BU4094BF SOP16 | |
| J149 151 153 154 156 157 301 302 303 R901 902 903 | RS3AD0000NA-0 | RMGCFMIC 0 OHM +0% 62MI5W | |
| R103 | RS3AD0100NA-7 | RMGCFMIC 10R0 OHM +5% 62MI5W | |
| R161 | RS3AD0101NA-5 | RMGCFMIC 100R0 OHM +5% 62MI5W | |
| R1 110 119 120 121 136 160 162 163 164 201 211 | RS3AD0102NA-3 | RMGCFMIC 1K0 OHM +5% 62MI5W | |
| R2 | RS3AD0104NA-A | RMGCFMIC 100K0 OHM +5% 62MI5W | |
| R202 212 | RS3AD0122NA-8 | RMGCFMIC 1K2 OHM +5% 62MI5W | |
| R203 213 | RS3AD0152NA-A | RMGCFMIC 1K5 OHM +5% 62MI5W | |
| R209 219 | RS3AD0183NA-A | RMGCFMIC 18K0 OHM +5% 62MI5W | |
| R109 134 | RS3AD0221NA-6 | RMGCFMIC 220R0 OHM +5% 62MI5W | |
| R204 214 | RS3AD0222NA-4 | RMGCFMIC 2K2 OHM +5% 62MI5W | |
| R205 215 | RS3AD0272NA-0 | RMGCFMIC 2K7 OHM +5% 62MI5W | |
| R206 216 | RS3AD0332NA-8 | RMGCFMIC 3K3 OHM +5% 62MI5W | |
| R806 807 810 811 | RS3AD0391NA-3 | RMGCFMIC 390R0 OHM +5% 62MI5W | |
| R122 804 805 808 809 | RS3AD0471NA-5 | RMGCFMIC 470R0 OHM +5% 62MI5W | |
| R102 | RS3AD0472NA-3 | RMGCFMIC 4K7 OHM +5% 62MI5W | |
| R104 | RS3AD0473NA-1 | RMGCFMIC 47K0 OHM +5% 62MI5W | |
| R207 217 | RS3AD0562NA-2 | RMGCFMIC 5K6 OHM +5% 62MI5W | |
| R800 801 | RS3AD0681NA-5 | RMGCFMIC 680R0 OHM +5% 62MI5W | |
| R100 101 | RS3AD0683NA-1 | RMGCFMIC 68K0 OHM +5% 62MI5W | |
| R208 218 | RS3AD0822NA-2 | RMGCFMIC 8K2 OHM +5% 62MI5W | |
| Q102 103 801 802 803 804 805 | H01-TRDTC114YNI-5 | TR-SSD DTC114YKA N 10K0 OHM 47K0 OHM | |
| Q800 | H01-TRKTD1304ND-5 | TR-SLPSWA KTD1304 N 20V 300MI0A SOT-23 | |
| 043 | XYGLU00K5RD-7 | GLUE, RED, W=0.5KG TYPELESS FOR SMT @KG | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|-------------------------------------|----------------------------|---|------|
| | 3SA-3072US-MAMI-1-A | AC EMBD IMA MAIN BD AVR630 | |
| C515 | PBC11KMA120-3 | AVR630 MAIN SINGLE PCB 330MM*245MM FR-1 | |
| C514 | CEHFA0228MN-3 | CE 2M12F +20% 16.0V 85C | |
| C509 510 | H01-CEHFA0688MN-5 | CE 6M18F +20% 16.0V 85C 16X31.5 SHL | |
| C517 | CEHHC0228MN-A | CE 2M12F +20% 35.0V 85C | |
| C504 505 | CEHIA0228MN-4 | CE 2M12F +20% 50.0V 85C | |
| C303 304 305 306 421 422 423 424 | H01-CEHJA0159NN-5 | CAP ELEC DL 15000uF 63.0V 85C | |
| D501 | CEHJA0477MN-9 | CE 470U0F +20% 63.0V 85C | |
| D503 | H01-DRBU10040BA-6 | D-BRDLC BRIDGE BU10-04 | |
| D502 505 | H01-DRBU604F0NA-9 | DIODE BRIDGE BU6-04F FRONTIER | |
| IC53 | H01-DRW204F00BA-A | DIODE BRIDGE W2-04F FRONTIER | |
| IC55 | H01-ICBA033T0I2-9 | IC-REGPOSFXD BA033T NORMAL | |
| IC59 | H01-ICKIA7805I2-7 | IC-REGPOSFXD KIA7805API NORMAL TO-220IS | |
| IC54 | H01-ICKIA7812I2-2 | IC-REGPOSFXD KIA7812API NORMAL | |
| IC56 | H01-ICKIA7824I2-7 | IC-REGPOSFXD KIA7824API TO-220IS NORMAL | |
| IC22 | H01-ICKIA7905I2-5 | IC-REGNEGFXD KIA7905PI NORMAL | |
| IC51 | H01-ICLM02068D2-A | IC-OPERAMP NJM2068M DUAL SOP8 | |
| IC52 | H01-ICLM07815BD-0 | IC-REGPOSFXD KIA7815API NORMAL | |
| L301 302 401 402 | H01-ICLM07915BD-9 | IC-REGNEGFXD KIA7915API NORMAL TO-220AB | |
| R378 379 471 472 | H01-LCNNNA050NA-1 | LFA 1MM 10MM 5 LEFT 0.0MM NONE | |
| R392 393 475 476 | H01-RI3IC022BEN-8 | RW 220M10 OHM +5% 5.0W 100PPM/'C -100PPM/'C | |
| R505 | RM3FC0100BN-7 | RMOF 10R0 OHM +5% 1.0W | |
| R514 | RM3GC0100CN-A | RMOF 10R0 OHM +5% 2.0W | |
| R504 506 507 508 510 515 | RM3GC022ACN-A | RMOF 2R2 OHM +5% 2.0W | |
| R509 | RM3GC033ACN-3 | RMOF 3R3 OHM +5% 2.0W | |
| PO72 | RM3GC047ACN-9 | RMOF 4R7 OHM +5% 2.0W | |
| PO71 | H01-RP3NA0101NN-A | POS 100R0 OHM 16.0V | |
| VR71 72 73 74 | H01-RP3NA0101NZ-3 | POS 100R0 OHM 16.0V | |
| NJ13 | RT6BA0201NB-A | PR 200R0 OHM +30% 100MI0W | |
| NJ14 | SO0A18P8CNN-7 | JACK-TELE SNAP-IN GOLDEN TELECOM GDL1-8P8C 8T BK 0 O | |
| NJ12 | H01-SOPA81900NN-8 | CONN-SPE TERMINAL SPKR 8P SH081136JP FE 19MM 8 -- 0 0 | |
| NJ11 | H01-SORA40RSANN-6 | JACK RCA 4P JB040131ZN GN BN PP TA | |
| Q329 330 433 434 | H01-SORA40RSCNN-A | JACK RCA 4P JB040131QN WH BU RD GY | |
| Q335 336 439 440 | H01-TR2SA1859BC-2 | TR-SHPLF 2SA1859A P -2.0A | |
| Q701 702 703 704 | H01-TR2SA1986BE-5 | TR-SHPLF 2SA1986-R P -15.0A | |
| Q331 332 435 436 | H01-TR2SC4137BE-0 | TR-SHPLF 2SC4137 N 100MI0A 20V | |
| Q333 334 437 438 | H01-TR2SC4883BC-8 | TR-SHPLF 2SC4883A N 2.0A | |
| REWORK DSPBD W601 | H01-TR2SC5358BO-6 | TR-SHPLF 2SC5358-R N 15.0A | |
| W401 | H01-WC1164605C1-7 | WCL 460-05-05 UL1007 HOOK-UP 16 460MM BK 05 05 | |
| W301 | H01-WC1180905C1-1 | WCL 090-05-05 UL1007 HOOK-UP 18 90MM BK 05 05 | |
| N801 802 803 804 | H01-WC1221905C1-9 | WCL 190-05-05 UL1007 HOOK-UP 22 190MM BK 05 05 | |
| N807 809 | H01-WG02SB80800-0 | WIRECONASY UNIQUE 2 80MM UL1007 PVC DISCRETE 26 | |
| N808 | H01-WG03SB82100-7 | WIRECONASY DL 2.0MM 3P 210MM UL1007 RIBBON 26 12 | |
| P812 813 815 816 | H01-WG03SB84400-4 | WIRECONASY DL 2.0MM UNIQUE 3P 440MM UL1007 PVC DISCRETE 26 1 | |
| P801 802 803 804 810 | H01-WN02SB00000-9 | CONN 2.0MM 2 MA ST NAT GT201-2P-TS | |
| P805 814 | H01-WN02SD00000-7 | CONN 2.5MM 2 MA ST NAT 0 0 | |
| P807 | H01-WN03SB00000-6 | CONN 2.0MM 3 MA ST NAT GT201-3P-TS | |
| P806 | H01-WN03SE00000-3 | CONN 3.96MM PITCH MOLEX 35313-0310 | |
| P808 | H01-WN04SB00000-3 | CONN 2.0MM 4 MA ST NAT GT201-4P-TS | |
| P811 | H01-WN08SD00000-0 | CONN 2.5MM 8 MA ST NAT 0 0 | |
| N805 | H01-WN19SB00000-6 | CONN 2.0MM 19 MA ST NAT MOLEX 35336-1910 0 0 | |
| | H01-WS8263605EN-8 | WIRECONASY DL 2.0MM 8P 360MM UL1533 SHIELD 26 1 | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|--|---|--|------|
| N806 | H01-WSE263905EN-5 XY0N211N5WH-4 XY0P523K000-A XY0P801K000-A XY1N127N0WH-5 XY1N218M3SW-4 XY1P202K000-1 XY5020000AA-0 XY57501K0YW-0 XY6R301K000-0 XY74601K0WH-9 XYALC01G000-2 XYRF801G000-7 XYWAX10K000-6 XYWD405G000-0 | WIRECONASY DL 2.0MM 15P 390MM UL1533 SHIELD 26 1 CABLE TIE W=0.2MM L=11.5CM WHITE @ STRIP WIRE,IRON,D=0.5MM,N.W=23KG @KG WIRE TIN D=0.8MM N.W=1.0KG @KG ADHESIVE WHITE D=1.1CM L=27CM @KG GLUE FURROW W=12MML=18.3M SS WHITE @ROLL WIRE, TIN, D=1.2MM N.W=2.0KG @KG ADHESIVE SUP-GLUE "AA" #502 TRANS @BOTT GLUE, YELLOW, N.W=1.0KG #575 @KG BAR,TIN,63/37,N.W=1.0KG @KG OINTMENT HTC #SDL-746 NW=1.0KG WHITE @KG ALCOHOL V=1.0GALLON @GALLON FLUX #RF-800 V=1.0 GALLON @ GALLON ANTI-OXIDATION,WAX,W-1#,N.W=10KG,@KG CLEANER,#WD-40,V=5.0 GALLONS @GALLONS | |
| HK11 | H01-ZMC11HS0300-9 | H/SINK REG 118*20*60 | |
| HK12 | H01-ZMC11HS0400-0 | AC HEATSINK DIODE 47X26X12 AVR630 -- ME | |
| 070 | ZSTBM3010BB-5 | SCREW ST BH 3X10 | |
| 080 | ZSTBM3012BY-A | SCREW ST BH 3X12 PIVOT | |
| 060 | ZSTWM3008BY-8 | SCREW ST WPH 3X8 | |
| 090 | ZWM803305PZ-1 | WASHER PLAIN 3 | |
| 3SA-3072US-MAAA-1-8 | | AC ESABD IAA MAIN BD AXIAL AVR630 | |
| C101 102 103 104 107 108 109 110 111 112 113 114 115 116 117 118 209 | CCKID0101NA-7 | CC 100P0F +10% -10% 50.0V Y5P | |
| C307 308 313 314 403 404 569 570 | CCKID0271NN-0 | CC 270P0F +10% -10% 50.0V 2B4 | |
| C433 601 602 | CCMFD0103NN-4 | CC 10N0F +20% -20% 16.0V Y5S | |
| C333 434 | CCMFD0472NN-6 | CC 4N7F +20% -20% 16.0V Y5R | |
| C119 120 212 214 527 | CCZID0104NA-2 | CC 100N0F +80% -20% 50.0V F | |
| D205 206 301 302 303 304 305 306 307 308 401 402 403 404 405 406 407 408 409 410 411 412 | H01-DG1N04148NB-4 | D-SLP 1N4148 100.0V 150E-3A | |
| D207 | H01-DZ1N05231NB-1 | D-ZENER 1N5231B 5.1V 500MIOW | |
| D204 | H01-DZMTZ12V0NB-0 | D-ZENER MTZJ 12.0V 500MIOW | |
| R303 304 477 478 | RC3DI0100IN-2 | RCF 10R0 OHM +5% 250MIOW | |
| R101 102 105 106 109 110 113 114 213 215 221 353 354 369 370 457 458 459 460 609 614 | RC3DI0101IN-0 | RCF 100R0 OHM +5% 250MIOW | |
| R211 603 | RC3DI0102IN-9 | RCF 1K0 OHM +5% 250MIOW | |
| R485 516 605 606 608 610 611 613 | RC3DI0103IN-7 | RCF 10K0 OHM +5% 250MIOW | |
| R207 214 216 217 218 219 220 309 310 479 480 503 604 | RC3DI0104IN-5 | RCF 100K0 OHM +5% 250MIOW | |
| R701 707 710 711 | RC3DI0122IN-3 | RCF 1K2 OHM +5% 250MIOW | |
| R607 612 | RC3DI0123IN-1 | RCF 12K0 OHM +5% 250MIOW | |
| R363 364 365 366 461 462 463 464 | RC3DI0150IN-9 | RCF 15R0 OHM +5% 250MIOW | |
| R380 381 386 387 481 483 488 490 | RC3DI0152IN-5 | RCF 1K5 OHM +5% 250MIOW | |
| R341 342 343 344 384 385 437 438 439 440 482 489 | RC3DI0153IN-3 | RCF 15K0 OHM +5% 250MIOW | |
| R311 312 313 314 405 406 407 408 | RC3DI0162IN-2 | RCF 1K6 OHM +5% 250MIOW | |
| R339 340 345 346 347 348 349 350 433 434 435 436 441 442 443 444 | RC3DI0201IN-7 | RCF 200R0 OHM +5% 250MIOW | |
| R317 318 319 320 321 322 409 410 411 412 413 414 | RC3DI0221IN-1 | RCF 220R0 OHM +5% 250MIOW | |
| R390 391 486 492 | RC3DI0223IN-8 | RCF 22K0 OHM +5% 250MIOW | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|--|-------------------|--|------|
| R371 372 373 374 465 466 467 468 615 | RC3DI022AIN-2 | RCF 2R2 OHM +5% 250MI0W | |
| R497 702 705 708 709 | RC3DI0271IN-8 | RCF 270R0 OHM +5% 250MI0W | |
| R209 498 | RC3DI0273IN-4 | RCF 27K0 OHM +5% 250MI0W | |
| R224 | RC3DI0274IN-2 | RCF 270K0 OHM +5% 250MI0W | |
| R301 302 401 402 | RC3DI0331IN-5 | RCF 330R0 OHM +5% 250MI0W | |
| R225 305 306 403 404 | RC3DI0333IN-1 | RCF 33K0 OHM +5% 250MI0W | |
| R382 383 484 487 491 501 502 | RC3DI0393IN-5 | RCF 39K0 OHM +5% 250MI0W | |
| R307 308 415 416 | RC3DI0433IN-8 | RCF 43K0 OHM +5% 250MI0W | |
| R315 316 593 594 | RC3DI0471IN-0 | RCF 470R0 OHM +5% 250MI0W | |
| R223 | RC3DI0513IN-A | RCF 51K0 OHM +5% 250MI0W | |
| R323 324 325 326 329 330 333 334 335 336 337 338 421 422 423 424 425 426 427 428 429 430 431 432 | RC3DI0561IN-A | RCF 560R0 OHM +5% 250MI0W | |
| R375 376 469 470 | RC3DI0820IN-1 | RCF 82R0 OHM +5% 250MI0W | |
| R493 | RC3DI0822IN-8 | RCF 8K2 OHM +5% 250MI0W | |
| R388 389 473 474 | RC3EG0100LN-4 | RCF 10R0 OHM +5% 500MI0W | |
| R327 328 417 418 | RM1DI0333IN-4 | RMF 33K0 OHM +1% 250MI0W | |
| R331 332 419 420 | RM1DI1451IN-4 | RMF 1K45 OHM +1% 250MI0W | |
| R351 352 367 368 445 446 447 448 | H01-RM3EG0100LN-A | RMF 10R0 OHM +5% 500MI0W | |
| 3SA-3072US-MAAR-1-A AC ESABD IAR MAIN BD RADIAL AVR630 | | | |
| C315 316 409 410 | CCDIC0030NE-3 | CC 3P0F +0P25F -0P25F 50.0V NPO | |
| C317 318 411 412 | CCKIC0181NA-0 | CC 180P0F +10% -10% 50.0V Y5P | |
| C329 330 425 426 | CCKIC0222NA-1 | CC 2N2F +10% -10% 50.0V Y5P | |
| C331 332 407 408 | CEHEC0227NN-A | CE 220U0F +20% 10.0V 85C | |
| C432 | CEHEC0477MN-A | CE 470U0F +20% 10.0V 6.3X11 85C | |
| C206 208 213 309 310 405 406 526 | CEHGC0107NN-6 | CE 100U0F +20% 25.0V 6.3X1185C | |
| C210 | CEHIC0105NN-7 | CE 1U0F +20% 50.0V 5X11 85C | |
| C211 301 302 319 320 321 322 401 402 413 414 415 416 429 518 519 520 521 522 523 | CEHIC0106NN-5 | CE 10U0F +20% 50.0V 85C | |
| C207 | CEHIC0475NN-7 | CE 4U7F +20% 50.0V 85C | |
| C325 326 327 328 417 418 419 420 | CFIJC0104NN-7 | CPM 100N0F +10% 63.0V | |
| C501 502 503 | CFIQC0104NN-5 | CPM 100N0F +10% 250.0V | |
| C323 324 430 431 | CFLJC0683NN-7 | CPM 68N0F +5% 63.0V | |
| C506 507 508 511 512 513 516 528 529 | CPIKC0473NN-0 | CPF 47N0F +10% 100.0V | |
| F501 502 503 504 505 506 | H01-FURN2200006-6 | FUSE T 2A 250V 7.6X8.6 SS-5 SAVE FUSETECH | |
| Q309 310 411 412 | H01-TR2SA1145NA-2 | TR-SLPLF 2SA1145Y TO-92MOD P -50MI0A -150V | |
| Q443 | H01-TRKRC107MNA-9 | TR-SLPSWA KRC107M N | |
| Q315 316 319 320 327 328 417 418 421 422 431 432 442 | H01-TRKTA1024NA-7 | TR-SLPLF KTA1024 Y P 50MI0A -150V | |
| Q605 607 | H01-TRKTA1266NA-0 | TR-SLPLF KTA1266 Y P 150MI0A | |
| Q311 312 410 413 414 | H01-TRKTA1268NA-4 | TR-SHPLF KTA1268BL P 100MI0A 120V | |
| Q307 308 407 408 426 441 606 608 | H01-TRKTC3198NA-3 | TR-SLPLF KTC3198BL N 150MI0A | |
| Q301 302 303 304 305 306 313 314 337 338 401 402 403 404 405 406 409 415 416 425 | H01-TRKTC3200NA-9 | TR-SHPLF KTC3200BL N 100MI0A 120V | |
| Q317 318 321 322 323 324 419 420 423 424 429 430 | H01-TRKTC3206NA-A | TR-SLPLF KTC3206 Y N 50MI0A 150V | |
| Q602 | H01-TRKTD1302NA-0 | TR-SLPLF KTD1302 B N 300MI0A 20V | |
| G101 102 | H01-ZNMSA4004SN-4 | TERMLUG GND | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|---------|----------------------------|--|------|
| | 3SA-3072US-PA00-1-2 | AC BOM PKG AVR630 | |
| | H01-ATALF039ABK-A | ANTENNA WIRE ANTENNA LOOP CT01-AM 0 0 | |
| | BTA3A1511SF-0 | BATTERY ALKALINE 1.5V AAA | |
| | H01-RYC1101HA00-9 | REMOCON AVR630 | BK |
| | H01-RYD0201HA00-6 | REMOCON AVR630EU | IB |
| | H01-RYC1202HA00-5 | REMOCON ZONE 2 | |
| | H01-WAB01200203-9 | ANTENNA WIRE 75 CT02-FM 0 0 | BK |
| | H01-WAD01200303-3 | ANTENNA WIRE 75 OHM WIRE CT03-FM 00 | IB |
| | H01-WAUSA2103BK-1 | POWER CORD WS-004C+002E SJT#14*2C L=2M | BK |
| | H01-WAD022000BK-2 | WR002 H05VVF 0.75MMSQ 2G BLACK 2000MM | IB |
| | XY0M51K5M00-3 | MEMBRANE POLY TRANS W=0.5M L=1.5KM @ROLL | |
| | XY1N218M3CL-9 | GLUE TRANSPARENT W=12MM L=18.3M @ROLL | |
| | XY7N636M5CL-8 | Glue, Transparent,W=76mm, L=36.5m @m | |
| | XYGLAA5K200-3 | GLASS CLEANER,N.W=0.52KG @BOTTLE | |
| | XYJBLA4L800-5 | WAX JUBILEE, CLEANER V=0.48LITER @BOTTLE | |
| | ZBP00020350-4 | POLYBAG BATTERY | |
| | ZBP00122051-8 | BAG PE 330 X245 T0.05 | |
| | ZHC1201AAWH-A | FILM SHEET PE 920 X 1000 | |
| | ZKC1101HB00-9 | MANUAL AVR630 | BK |
| | ZKD0201HA00-4 | MANUAL AVR630 EU | IB |
| | ZKC1104HA00-A | BOX CARTON AVR630 | BK |
| | ZKD0204HA00-3 | BOX CARTON AVR630EU | IB |
| | ZKC1113HA00-9 | CARD WARRANTY | |
| | ZKC1116HA00-8 | QUICK SETUP GUIDE AVR630 | |
| | ZKC1173HA00-1 | LABEL BARCODE AVR630 | BK |
| | ZKD0273HA00-5 | LABEL BARCODE AVR630EU | IB |
| | ZKC11H96A00-1 | POLISHING CLOTH | |
| | ZKC1214HA00-A | LABEL SAFETY LEAFLET | BK |
| | ZKD0114HA00-4 | SAFETY MANUAL EU | IB |
| | ZKC1263HA00-0 | INSERT RS232 NOTE PAPER | |
| | ZKC1270HA00-7 | LABEL "PLEASE" | |
| | ZKGEN43HA00-0 | CARD INSERT ENVELOPE | |
| | ZKGEN56HA00-5 | ENVELOPE POLISHING CLOTH | |
| | ZKGEN73HA00-7 | LABEL BARCODE BLANK | |
| | ZQC1101HAWH-2 | CUSHION POLY EPS RIGHT AVR430/630 | |
| | ZQC1102HAWH-9 | CUSHION POLY EPS LEFT AVR430/630 | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|--|----------------------------|--|------|
| | 3SA-3072US-POMI-1-8 | AC EMBD IMA PRO BD AVR630 | |
| | PBC11KPOB20-7 | AVR630 PROCESSOR DUAL PCB 209MM*170MM FR-4 | |
| C20 | CEHFC0106NN-4 | CE 10U0F +20% 16.0V 85C 5X11 | |
| SK1 | H01-RLL1296122A-5 | RELAYSGNL 12.0V 960.0OHM 3.0A | |
| NJ51 52 53 54 55 | H01-SORA40GNDNN-7 | JACK RCA 4P JB040131PN WWRR | |
| P20 20-1 | H01-WC2260755CG-7 | WIRECONASY DL 2.0MM 02P 75MM ANG UL1007 RIBBON 26 1 B2011H02 | |
| P13 | H01-WN03SB00000-6 | CONN 2.0MM 3 MA ST NAT GT201-3P-TS | |
| P1 3 12 | H01-WN04SB00000-3 | CONN 2.0MM 4 MA ST NAT GT201-4P-TS | |
| P4 | H01-WN06SB00000-8 | CONN 2.0MM 6 MA ST NAT GT201-6P-TS | |
| P10 | H01-WN08SB00000-2 | CONN 2.0MM 8 MA ST NAT GT201-8P-TS | |
| P2 | H01-WN11AB00000-0 | CONN 2.0MM 11 MA R NAT SOCKET MOLEX 35237-1110 0 0 | |
| P9 | H01-WN15SB00000-7 | CONN 2.0MM 15 MA ST NAT GT201-15P-TS | |
| P6 | H01-WN17AB00000-4 | CONN 2.0MM 17 MA R NAT SOCKET MOLEX 35237-1710 0 0 | |
| N2 P7 | H01-WN19AB00000-9 | CONN 2.0MM 19 MA R NAT SOCKET MOLEX 35237-1910 0 0 GLUE FURROW W=6MM L=18.3M SS WHITE @ROLL | |
| | XY0N618M3SW-A | | |
| | XY0P801K000-A | WIRE TIN D=0.8MM N.W=1.0KG @KG | |
| | XY1N209M0DW-4 | GLUE TAPE W=12MM L=9.0M DS WHITE @ROLL | |
| | XY1N218M3SW-4 | GLUE FURROW W=12MML=18.3M SS WHITE @ROLL | |
| | XY1P202K000-1 | WIRE, TIN, D=1.2MM N.W=2.0KG @KG | |
| | XY30155G00-0 | TCE,CLEANER,-301#,V=55GALLON,TYPELESS @GALLON | |
| | XY4N836M5CL-9 | GLUE TRANSPARENT W=48MM L=36.5M @ROLL | |
| | XY6R301K000-0 | BAR,TIN,63/37,N.W=1.0KG @KG | |
| | XYALC01G000-2 | ALCOHOL V=1.0GALLON @GALLON | |
| | XYGLU00K5RD-7 | GLUE, RED, W=0.5KG TYPELESS FOR SMT @KG | |
| | XYJUI00K5GY-5 | JUICE TIN N=0.5KG GREY @KG | |
| | XYRF801G000-7 | FLUX #RF-800 V=1.0 GALLON @ GALLON | |
| | XYWAX10K000-6 | ANTI-OXIDATION,WAX,W-1#,N.W=10KG,@KG | |
| | 3SA-3072US-POAR-1-8 | AC ESABD IAR PRO BD RADIAL AVR630 | |
| C79 80 82 83 113 114 116 118 139 140 142 144 | H01-CEHFC0106AH-5 | CE 10U0F +20% 16.0V 85C AH SAMYOUNG | |
| C6 7 13 14 16 17 19 37 38 40 41 53 54 56 57 59 60 75 76 84 85 87 88 90 91 106 107 121 123 124 125 126 131 147 149 151 152 159 160 162 164 169 170 172 174 190 195 196 197 198 205 206 207 | CEHFC0106NN-4 | CE 10U0F +20% 16.0V 85C 5X11 | |
| C5 8 15 18 39 42 55 58 74 77 78 81 86 89 92 95 96 97 98 99 100 101 102 103 104 105 108 109 112 119 120 122 127 129 132 133 138 145 146 153 158 165 168 175 189 201 202 208 209 210 224 225 | CEHFC0476NN-4 | CE 47U0F +20% 16.0V 85C | |
| C176 177 | CEHGC0337NN-0 | CE 330UI0F +20% 25V 85C | |
| C221 222 | CEHIC0475NN-7 | CE 4U7F +20% 50.0V 85C | |
| GND1 | H01-ZNMSA4004SN-4 | TERMLUG GND | |
| | 3SA-3072US-POSB-1-9 | AC ESABD SMD BOT PRO BD AVR630 | |
| C1 2 3 4 9 10 11 12 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 43 44 45 46 47 48 49 50 61 62 63 64 65 67 69 70 71 72 73 110 117 128 135 136 143 155 156 163 166 173 178 179 180 181 182 183 184 191 192 193 194 228 229 | CZJII0101BE-2 | CCCFMIC 100P0F +5% -5% 50.0V NPO | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|---|------------------------------------|--|------|
| C215 216 | CZJII0103CC-1 | CCCFMIN 10N0F +-5% 50.0V X7R 0805 | |
| C188 203 204 226 227 | CZJII0330BE-9 | CCCFMIC 33P0F +5% -5% 50.0V NP0 | |
| C130 134 | CZJII0331BE-7 | CCCFMIC 330P0F +5% -5% 50.0V NP0 | |
| C94 148 | CZKII0222BC-8 | CCCFMIC 2N2F +10% -10% 50.0V X7R | |
| C51 52 185 186 187 211 D2 | CZZFI0104BF-8 H01-DS0KDS160NB-4 | CCCFMIC 100N0F +80% -20% 16.0V Y5V D-SLP KDS160 85.0V 100MI0A | |
| IC29 30 | H01-ICLM02068D2-A | IC-OPERAMP NJM2068M DUAL SOP8 | |
| IC10 | H01-ICTC9273NDA-0 | IC-SWITCH TC9273F-004 SOP28 ANALOG SWITCH | |
| J7 8 9 10 11 12 26 38 39 40 41 R317 318 | RS3AD0000NA-0 | RMGCFMIC 0 OHM +0% 62MI5W | |
| R1 10 11 13 18 30 31 44 63 64 77 79 82 88 89 98 101 106 107 112 121 126 131 133 136 137 141 142 166 167 171 172 174 184 185 189 195 197 198 201 204 231 238 260 273 288 | RS3AD0101NA-5 | RMGCFMIC 100R0 OHM +5% 62MI5W | |
| R3 4 27 29 32 34 46 48 49 51 57 59 61 71 91 92 93 94 95 96 138 139 140 143 144 145 150 151 152 153 154 155 168 169 170 221 229 247 254 256 264 269 277 279 286 293 301 303 310 324 325 326 329 334 343 344 345 346 347 348 349 350 | RS3AD0102NA-3 | RMGCFMIC 1K0 OHM +5% 62MI5W | |
| R2 5 12 14 15 16 17 21 26 28 33 35 40 41 42 43 45 47 50 52 58 60 65 66 67 68 85 86 99 100 103 104 109 110 113 114 119 120 123 124 129 130 146 147 161 162 175 176 181 183 186 188 191 192 193 194 196 199 203 214 217 218 225 233 234 236 239 241 244 245 246 2 | RS3AD0104NA-A | RMGCFMIC 100K0 OHM +5% 62MI5W | |
| R134 163 164 165 | RS3AD0123NA-6 | RMGCFMIC 12K0 OHM +5% 62MI5W | |
| R235 237 | RS3AD0152NA-A | RMGCFMIC 1K5 OHM +5% 62MI5W | |
| R132 255 263 270 278 294 302 | RS3AD0202NA-A | RMGCFMIC 2K0 OHM +5% 62MI5W | |
| R208 209 212 216 | RS3AD0221NA-6 | RMGCFMIC 220R0 OHM +5% 62MI5W | |
| R210 213 220 226 259 268 274 292 298 315 327 336 337 | RS3AD0222NA-4 | RMGCFMIC 2K2 OHM +5% 62MI5W | |
| R200 202 | RS3AD0242NA-9 | RMGCFMIC 2K4 OHM +5% 62MI5W | |
| R205 249 | RS3AD0272NA-0 | RMGCFMIC 2K7 OHM +5% 62MI5W | |
| R20 56 62 74 115 116 117 118 | RS3AD0333NA-6 | RMGCFMIC 33K0 OHM +5% 62MI5W | |
| R222 230 | RS3AD0362NA-A | RMGCFMIC 3K6 OHM +5% 62MI5W | |
| R177 179 | RS3AD0432NA-4 | RMGCFMIC 4K3 OHM +5% 62MI5W | |
| R6 9 22 25 36 39 73 76 127 148 149 178 182 187 206 211 284 335 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 | RS3AD0471NA-5 | RMGCFMIC 470R0 OHM +5% 62MI5W | |
| R128 | RS3AD0472NA-3 | RMGCFMIC 4K7 OHM +5% 62MI5W | |
| R69 70 102 105 240 250 283 285 307 309 312 | RS3AD0512NA-6 | RMGCFMIC 5K1 OHM +5% 62MI5W | |
| R108 111 173 180 207 215 | RS3AD0821NA-4 | RMGCFMIC 820R0 OHM +5% 62MI5W | |
| R248 | RS3AD0912NA-1 | RMGCFMIC 9K1 OHM +5% 62MI5W | |
| Q20 | H01-TRDTA114YNI-9 | TR-SSD DTA114YKA P 10K0 OHM 47K0 OHM | |
| Q54 | H01-TRDTC114YNI-5 | TR-SSD DTC114YKA N 10K0 OHM 47K0 OHM | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|---|----------------------------|---|------|
| Q1 2 19 24 26 27 28 29 30 31 33 36 38 39 40 42 44 45 46 | H01-TRKTD1304ND-5 | TR-SLPSWA KTD1304 N 20V 300MI0A SOT-23 | |
| | 3SA-3072US-POST-1-4 | AC ESABD SMD TOP PRO BD AVR630 | |
| C223 | CZJII0101BE-2 | CCCFMIC 100P0F +5% -5% 50.0V NP0 | |
| C217 218 | CZJII0103CC-1 | CCCFMIN 10N0F +-5% 50.0V X7R 0805 | |
| C219 220 | CZJII0150CE-A | CCCFMIN 15P0F +5% -5% 50.0V NP0 0805 | |
| C66 68 111 115 137 141 154 157 161 167 171 199 200 | CZJII0330BE-9 | CCCFMIC 33P0F +5% -5% 50.0V NP0 | |
| C213 214 | CZJII0682CC-3 | CCCFMIN 6N8F +5% -5% 50.0V X7R 0805 | |
| C93 150 | CZKII0222BC-8 | CCCFMIC 2N2F +10% -10% 50.0V X7R | |
| C212 | CZZFI0104BF-8 | CCCFMIC 100N0F +80% -20% 16.0V Y5V | |
| D8 9 12 14 21 | H01-DSUDZ09V1NB-7 | D-ZENER UDZS 9.1B 9.1V 200MI0W | |
| IC5 14 | H01-ICKIC9162DA-5 | IC-SWITCH KIC9162AF SOP28 ANALOG SWITCH | |
| IC3 | H01-ICKIC9163DA-7 | IC-SWITCH KIC9163AF SOP28 ANALOG SWITCH | |
| IC2 18 | H01-ICKIC9459D5-8 | IC-LOWFREQ KIC9459F SOP24 TONE/VOL/BAL/MUTE | |
| IC1 4 7 8 9 11 12 13 15 16 17 20 21 23 24 25 26 27 | H01-ICLM02068D2-A | IC-OPERAMP NJM2068M DUAL SOP8 | |
| IC19 | H01-ICLMO9482DA-5 | IC-LOWFREQ KIC9482F SOP28 TONE/VOL/BAL/MUTE | |
| IC22 | H01-ICNJM4556DM-0 | IC-OPERAMP NJM4556AM DUAL OP | |
| IC6 | H01-ICTC9273NDA-0 | IC-SWITCH TC9273F-004 SOP28 ANALOG SWITCH | |
| IC28 | H01-ICTC9481FDA-0 | IC-LOWFREQ TC9481F SOP28 TONE | |
| R75 78 232 242 243 253 280 290 304 314 | RS3AD0101NA-5 | RMGCFMIC 100R0 OHM +5% 62MI5W | |
| R72 80 81 122 125 | RS3AD0102NA-3 | RMGCFMIC 1K0 OHM +5% 62MI5W | |
| R135 158 | RS3AD0123NA-6 | RMGCFMIC 12K0 OHM +5% 62MI5W | |
| R223 262 271 295 | RS3AD0183NA-A | RMGCFMIC 18K0 OHM +5% 62MI5W | |
| R7 8 23 24 37 38 53 54 224 228 257 261 272 276 296 300 316 330 333 | RS3AD0222NA-4 | RMGCFMIC 2K2 OHM +5% 62MI5W | |
| R156 157 159 160 | RS3AD0332NA-8 | RMGCFMIC 3K3 OHM +5% 62MI5W | |
| R19 55 83 84 87 90 97 190 219 265 266 267 291 332 | RS3AD0333NA-6 | RMGCFMIC 33K0 OHM +5% 62MI5W | |
| R227 258 275 299 331 | RS3AD0474NA-A | RMGCFMIC 470K0 OHM +5% 62MI5W | |
| Q3 13 14 17 23 25 32 34 35 37 41 43 50 52 | H01-TRDTA114YNI-9 | TR-SSD DTA114YKA P 10K0 OHM 47K0 OHM | |
| Q4 7 8 9 10 11 12 15 16 51 53 58 59 | H01-TRKTD1304ND-5 | TR-SLPSWA KTD1304 N 20V 300MI0A SOT-23 | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|--|--------------------------------|--|------|
| | 3SA-3072US-SRMI-1-6 | AC EMBD IMA SURROUND BD AVR630 | |
| C301 302 401 402 501 502 | PBC11KSRI20-5 CEHJA0477MN-9 | AVR630 SURROUND SINGLE PCB 330MM*247MM CE 470U0F +20% 63.0V 85C | |
| L301 401 501 | H01-LCNNNA050NA-1 | LFA 1MM 10MM 5 LEFT 0.0MM NONE | |
| R338 438 538 | H01-RI3IC022BEN-8 | RW 220M10 OHM +5% 5.0W 100PPM/'C -100PPM/'C | |
| R345 445 545 | RM3FC0100BN-7 | RMOF 10R0 OHM +5% 1.0W | |
| PO51 | H01-RP3NA0101NN-A | POS 100R0 OHM 16.0V | |
| PO52 | H01-RP3NA0101NZ-3 | POS 100R0 OHM 16.0V | |
| VR31 32 51 | H01-RT7EA0201NB-6 | PR 200R0 OHM +20% 500M10W | |
| NJ31 | H01-SOPA619BKNN-7 | CONN-SPE TERMINAL SPKR 6P SH0611708P FE 19MM 6 BK 0 0 | |
| Q316 416 516 | H01-TR2SA1859BC-2 | TR-SHPLF 2SA1859A P -2.0A | |
| Q319 419 519 | H01-TR2SA1986BE-5 | TR-SHPLF 2SA1986-R P -15.0A | |
| Q314 414 514 | H01-TR2SC4137BE-0 | TR-SHPLF 2SC4137 N 100M10A 20V | |
| Q317 417 517 | H01-TR2SC4883BC-8 | TR-SHPLF 2SC4883A N 2.0A | |
| Q318 418 518 | H01-TR2SC5358BO-6 | TR-SHPLF 2SC5358-R N 15.0A | |
| REWORK | H01-WC1181655C1-0 | WCL 165-05-05 UL1007 HOOK-UP 18 165MM BK 05 05 | |
| W401 | H01-WC1220905C1-A | WCL 090-05-05 UL1007 HOOK-UP 22 90MM BK 05 05 | |
| N301 | H01-WG03SB84200-0 | WIRECONASY DL 2.0MM UNIQUE 3P 420MM UL1007 PVC DISCRETE 26 1 | |
| P301 308 309 | H01-WN02AD00000-A | CONN 2.5MM 2 MA R NAT 0 0 | |
| P307 | H01-WN03SB00000-6 | CONN 2.0MM 3 MA ST NAT GT201-3P-TS | |
| P303 | H01-WN03SE00000-3 | CON 3.96MM PITCH MOLEX 35313-0310 | |
| P304 | H01-WN04SE00000-0 | CON 3.96MM PITCH MOLEX 35313-0410 | |
| N306 | H01-WS6262605EN-6 | WIRECONASY DL 2.0MM 6P 260MM UL1533 SHIELD 26 1 | |
| | XY0N211N5WH-4 | CABLE TIE W=0.2MM L=11.5CM WHITE @ STRIP | |
| | XY0P523K000-A | WIRE,IRON,D=0.5MM,N.W=23KG @KG | |
| | XY0P801K000-A | WIRE TIN D=0.8MM N.W=1.0KG @KG | |
| | XY1N218M3SW-4 | GLUE FURROW W=12MML=18.3M SS WHITE @ROLL | |
| | XY1P202K000-1 | WIRE, TIN, D=1.2MM N.W=2.0KG @KG | |
| | XY57501K0YW-0 | GLUE, YELLOW, N.W=1.0KG #575 @KG | |
| | XY6R301K000-0 | BAR,TIN,63/37,N.W=1.0KG @KG | |
| | XY74601K0WH-9 | OINTMENT HTC #SDL-746 NW=1.0KG WHITE @KG | |
| | XYALC01G000-2 | ALCOHOL V=1.0GALLON @GALLON | |
| | XYRF801G000-7 | FLUX #RF-800 V=1.0 GALLON @ GALLON | |
| | XYWAX10K000-6 | ANTI-OXIDATION,WAX,W-1#,N.W=10KG,@KG | |
| | XYWD405G000-0 | CLEANER,#WD-40,V=5.0 GALLONS @GALLONS | |
| | 3SA-3072US-SRAA-1-4 | AC ESABD IAA SURROUND BD AXIAL AVR630 | |
| D301 302 303 304 401 402 403 404 501 502 503 504 601 | H01-DG1N04148NB-4 | D-SLP 1N4148 100.0V 150E-3A | |
| R326 336 426 436 526 536 | RC3DI0101IN-0 | RCF 100R0 OHM +5% 250M10W | |
| R601 606 | RC3DI0103IN-7 | RCF 10K0 OHM +5% 250M10W | |
| R346 446 546 605 | RC3DI0104IN-5 | RCF 100K0 OHM +5% 250M10W | |
| R329 429 529 | RC3DI0122IN-3 | RCF 1K2 OHM +5% 250M10W | |
| R328 335 428 435 528 535 | RC3DI0150IN-9 | RCF 15R0 OHM +5% 250M10W | |
| R339 341 439 441 539 541 | RC3DI0152IN-5 | RCF 1K5 OHM +5% 250M10W | |
| R320 321 340 420 421 440 520 521 540 | RC3DI0153IN-3 | RCF 15K0 OHM +5% 250M10W | |
| R309 310 409 410 509 510 | RC3DI0162IN-2 | RCF 1K6 OHM +5% 250M10W | |
| R319 322 323 324 419 422 423 424 519 522 523 524 | RC3DI0201IN-7 | RCF 200R0 OHM +5% 250M10W | |
| R305 306 307 405 406 407 505 506 507 | RC3DI0221IN-1 | RCF 220R0 OHM +5% 250M10W | |
| R344 444 544 | RC3DI0223IN-8 | RCF 22K0 OHM +5% 250M10W | |
| R327 337 427 437 527 537 | RC3DI022AIN-2 | RCF 2R2 OHM +5% 250M10W | |
| R330 430 530 | RC3DI0271IN-8 | RCF 270R0 OHM +5% 250M10W | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|---|-------------------|---|------|
| R301 401 501 | RC3DI0331IN-5 | RCF 330R0 OHM +5% 250MIOW | |
| R302 402 502 | RC3DI0333IN-1 | RCF 33K0 OHM +5% 250MIOW | |
| R342 442 542 602 603 604 | RC3DI0393IN-5 | RCF 39K0 OHM +5% 250MIOW | |
| R304 404 504 | RC3DI0433IN-8 | RCF 43K0 OHM +5% 250MIOW | |
| R308 408 508 | RC3DI0471IN-0 | RCF 470R0 OHM +5% 250MIOW | |
| R311 314 315 316 317 318 411 414 415 416 417 418 511 514 515 516 517 518 | RC3DI0561IN-A | RCF 560R0 OHM +5% 250MIOW | |
| R334 434 534 | RC3DI0820IN-1 | RCF 82R0 OHM +5% 250MIOW | |
| R343 443 543 | RC3EG0100LN-4 | RCF 10R0 OHM +5% 500MIOW | |
| R312 412 512 | RM1DI0333IN-4 | RMF 33K0 OHM +1% 250MIOW | |
| R313 413 513 | RM1DI1451IN-4 | RMF 1K45 OHM +1% 250MIOW | |
| R303 325 333 403 425 433 503 525 533 | H01-RM3EG0100LN-A | RMF 10R0 OHM +5% 500MIOW | |
| 3SA-3072US-SRAR-1-6 | | AC ESABD IAR SURROUND BD RADIAL AVR630 | |
| C307 407 507 | CCDIC0030NE-3 | CC 3P0F +0P25F -0P25F 50.0V NPO | |
| C309 409 509 | CCKIC0181NA-0 | CC 180P0F +10% -10% 50.0V Y5P | |
| C304 306 404 406 504 506 | CCKIC0271NA-A | CC 270P0F +10% -10% 50.0V Y5P | |
| C331 431 531 | CCKIC0332NA-5 | CC 3N3F +10% -10% 50.0V Y5P | |
| C320 420 520 | CCKIC0472NA-0 | CC 4N7F +10% -10% 50.0V Y5P | |
| C308 408 508 | CEHEC0227NN-A | CE 220U0F +20% 10.0V 85C | |
| C305 405 505 | CEHGC0107NN-6 | CE 100U0F +20% 25.0V 6.3X1185C | |
| C303 311 312 403 411 412 503 511 512 601 | CEHIC0106NN-5 | CE 10U0F +20% 50.0V 85C | |
| C313 314 413 414 513 514 | CFIJC0104NN-7 | CPM 100N0F +10% 63.0V | |
| C310 410 510 | CFLJC0683NN-7 | CPM 68N0F +5% 63.0V | |
| Q305 405 505 | H01-TR2SA1145NA-2 | TR-SLPLF 2SA1145Y TO-92MOD P -50MI0A -150V | |
| Q308 311 315 408 411 415 508 511 515 | H01-TRKTA1024NA-7 | TR-SLPLF KTA1024 Y P 50MI0A -150V | |
| Q306 406 506 601 | H01-TRKTA1268NA-4 | TR-SHPLF KTA1268BL P 100MI0A 120V | |
| Q304 404 504 | H01-TRKTC3198NA-3 | TR-SLPLF KTC3198BL N 150MI0A | |
| Q301 302 303 307 320 401 402 403 407 420 501 502 503 507 520 | H01-TRKTC3200NA-9 | TR-SHPLF KTC3200BL N 100MI0A 120V | |
| Q309 312 313 409 412 413 509 512 513 | H01-TRKTC3206NA-A | TR-SLPLF KTC3206 Y N 50MI0A 150V | |
| G601 602 603 604 605 | H01-ZNMSA4004SN-4 | TERMLUG GND | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|---|----------------------------|--|------|
| | 3SA-3072US-SUMI-1-1 | AC EMBD IMA SUPPLY BD AVR630 | |
| | PBC11KSUI20-7 | AVR630 SUPPLY SINGLE PCB 163MM*330MM FR-1 | BK |
| | PBD02KSUI20-0 | AVR630EU SUPPLY SINGLE PCB 163MM*330MM FR-1 | IB |
| C118 | CCMOC0472NF-9 | CC 4N7F +20% -20% 250.0V Y5V | |
| C201 202 | H01-CEHJA0109NN-0 | CE 10MI0F +20% 63.0V 85C | |
| C103 | CEHJA0477MN-9 | CE 470U0F +20% 63.0V 85C | |
| D201 | H01-DRBU10040BA-6 | D-BRDLC BRIDGE BU10-04 | |
| F101 | H01-FUGF212A0XX-3 | FUSULSLWBL 12.0 A 250.0 V | BK |
| F101 | H01-FUGF26A30XX-9 | FUSVDETIMELG 6.3A 250.0 V 5X20 | IB |
| F1 | H01-FUGF23000XX-A | FUSULSLWBL 3A 250.0 V | BK |
| F1 | H01-FUGF202A0XX-4 | FUSVDETIMELG 2.0A 250.0 V 5X20 | IB |
| IC11 | H01-ICKIA7805I2-7 | IC-REGPOSFXD KIA7805API NORMAL TO-220IS | |
| R101 | H01-RA4EG0335LN-9 | RA 3M3 OHM +10% 500MI0W | BK |
| SK11 | H01-RLL1227111K-1 | RELAYPWR 12.0V 270.0OHM 10.0A | |
| R104 | RM3GC0390CN-8 | RMOF 39R0 OHM +5% 2.0W | |
| NS21 | H01-SOPA21275BK-3 | CONN-SPE AC OUTLET 2P 110V FE 12.75MM 2 BK 0 0 | BK |
| NS21 | H01-SOPA20019BK-A | CONN-SPE AC OUTLET 2P 220V FE 19MM2 BK 0 0 | IB |
| NJ70 | H01-SORA1JE01NN-0 | JACK RCA 1P JE010003MN GND OR | |
| NJ79 | H01-SOTOR179LBA-0 | D-LEM TORX-179L | |
| TP11 | H01-TXPWMS630A0-6 | TF-LAM ST/BY-TRANSFORMER AVR630 120V | BK |
| TP11 | H01-TXPWMSD02A0-1 | TF-LAM ST/BY-TRANSFORMER AVR630EU 230V | IB |
| W700 | H01-WG01S083000-8 | WIRECONASY UNIQUE 1P 300MM UL1007 PVC DISCRETE 22 2 | |
| N209 | H01-WG02SE81500-3 | WIRECONASY DL 3.96MM 2P 150MM UL1007 RIBBOM 16 1 | |
| N202 | H01-WG03SE81700-4 | WIRECONASY DL 3.96MM 3P 170MM UL1007 RIBBON 16 1 | |
| N203 | H01-WG04SE82400-7 | WIRECONASY DL 3.96MM 4P 240MM UL1007 RIBBON 16 1 | |
| P207 208 | H01-WN02SE00000-6 | CON 3.96MM PITCH HEADER 2 POS MOLEX 35328-0210 | |
| P201 | H01-WN04SE00000-0 | CON 3.96MM PITCH MOLEX 35313-0410 | |
| P206 | H01-WN07SD00000-3 | CNT PLUG ST 2.5mm 7P 5267-07A | |
| N700 | H01-WS5267605CN-A | CNT ASSY 2.0MM 5P 760MM SHIELD 26AWG UL1007 | |
| | XY0P523K000-A | WIRE,IRON,D=0.5MM,N.W=23KG @KG | |
| | XY30155G00-0 | TCE,CLEANER,-301#,V=55GALL0N,TYPELESS @GALLON | |
| | XY6R301K000-0 | BAR,TIN,63/37,N.W=1.0KG @KG | |
| | XYALC01G000-2 | ALCOHOL V=1.0GALLON @GALLON | |
| | XYGLU00K5RD-7 | GLUE, RED, W=0.5KG TYPELESS FOR SMT @KG | |
| | XYRF801G000-7 | FLUX #RF-800 V=1.0 GALLON @ GALLON | |
| HK11 | H01-ZMC12HS0100-3 | AC HEATSINK 17*15*30 AVR520 -- ME | |
| BK70 | H01-ZMC12S17A00-0 | AC PUN SHIELD DIGITAL ET | |
| 060 | ZSTBM3010BB-5 | SCREW ST BH 3X10 | |
| | XY0N211N5WH-4 | CABLE TIE W=0.2MM L=11.5CM WHITE @ STRIP | |
| | XY0N618M3SW-A | GLUE FURROW W=6MM L=18.3M SS WHITE @ROLL | |
| | XY0P801K000-A | WIRE TIN D=0.8MM N.W=1.0KG @KG | |
| | XY1N209M0DW-4 | GLUE TAPE W=12MM L=9.0M DS WHITE @ROLL | |
| | XY1N218M3SW-4 | GLUE FURROW W=12MML=18.3M SS WHITE @ROLL | |
| | XY1P202K000-1 | WIRE, TIN, D=1.2MM N.W=2.0KG @KG | |
| | XY4N836M5CL-9 | GLUE TRANSPARENT W=48MM L=36.5M @ROLL | |
| | XY57501K0YW-0 | GLUE, YELLOW, N.W=1.0KG #575 @KG | |
| | XY74601K0WH-9 | OINTMENT HTC #SDL-746 NW=1.0KG WHITE @KG | |
| | XYWAX10K000-6 | ANTI-OXIDATION,WAX,W-1#,N.W=10KG,@KG | |
| | 3SA-3072US-SUAA-1-A | AC ESABD IAA SUPPLY BD AXIAL AVR630 | |
| C101 108 109 113 114 | CCZID0104NA-2 | CC 100N0F +80% -20% 50.0V F | |
| D111 114 | H01-DG1N04148NB-4 | D-SLP 1N4148 100.0V 150E-3A | |
| D101 102 104 105 106 107 110 112 301 D113 | H01-DR1N04004NA-1 | D-SR 1N4004 400.0V 1.0A | |
| | H01-DZ1N05231NB-1 | D-ZENER 1N5231B 5.1V 500MI0W | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|----------------------------|-------------------|---|------|
| D109 | H01-DZ1N5239BNB-A | D-ZENER 1N5239B 9.1V 500MI0W | |
| D115 116 | H01-DZMTZJ22BNB-8 | DIODE RECT MTZ J 22B 22V 0.5W | |
| R109 114 301 | RC3DI0102IN-9 | RCF 1K0 OHM +5% 250MI0W | |
| R105 111 | RC3DI0103IN-7 | RCF 10K0 OHM +5% 250MI0W | |
| R110 | RC3DI0104IN-5 | RCF 100K0 OHM +5% 250MI0W | |
| R1 | RC3DI0153IN-3 | RCF 15K0 OHM +5% 250MI0W | |
| R107 | RC3DI0272IN-6 | RCF 2K7 OHM +5% 250MI0W | |
| R102 103 | RC3DI047AIN-1 | RCF 4R7 OHM +5% 250MI0W | |
| R106 | RC3DI0562IN-8 | RCF 5K6 OHM +5% 250MI0W | |
| 3SA-3072US-SUAR-1-1 | | AC ESABD IAR SUPPLY BD RADIAL AVR630 | |
| C105 106 107 110 | CCKIC0103NA-9 | CC 10N0F +10% -10% 50.0V Y5P | |
| C111 | CEHGC0477NN-6 | CE 470U0F +20% 25.0V 85C | |
| C112 | CEHGC0687NN-6 | CE 680U0F +20% 25.0V 85C | |
| C115 117 | CEHIC0105NN-7 | CE 1U0F +20% 50.0V 5X11 85C | |
| C116 | CEHIC0106NN-5 | CE 10U0F +20% 50.0V 85C | |
| C104 | CEHIC0107NN-3 | CE 100U0F +20% 50.0V 85C | |
| C203 204 205 | CFIOC0104NN-5 | CPM 100N0F +10% 250.0V | |
| C102 | CFLJC0224NN-6 | CPM 220N0F +5% 63.0V | |
| FH10 11 13 14 | H01-SOPS1FEHDNN-9 | TERMFUSEHLDR FUSE-HOLDER J4210020001X | |
| Q101 102 | H01-TRMPSA06NNA-4 | TR-SLPLF MPSA06 N 500MI0A TO-92 | |
| G101 102 | H01-ZNMSA4004SN-4 | TERMLUG GND | |
| 3SA-3072US-SUSB-1-2 | | AC ESABD SMD SUPPLY BD AVR630 | |
| C701 702 | CZZFI0104BF-8 | CCCFMIC 100N0F +80% -20% 16.0V Y5V | |
| L701 702 | H01-FB2K52012NN-5 | FBEAD SURFACE MT 2500OHM FCM2012H-252T02 | |
| R701 | RS3AD0102NA-3 | RMGCFMIC 1K0 OHM +5% 62MI5W | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|----------------------------------|----------------------------|--|------|
| | 3SA-3072US-VDMI-1-3 | AC EMBD IMA VIDEO BD AVR630 | |
| For below rework | PBC11KVDI20-2 | AVR630 VIDEO SINGLE PCB 197MM*247MM FR-1 | |
| C152 199 | CCZID0104NA-2 | CC 100N0F +80% -20% 50.0V F | |
| C121 | CEHEC0227NN-A | CE 220U0F +20% 10.0V 85C | |
| C117 | CEHFC0106NN-4 | CE 10U0F +20% 16.0V 85C 5X11 | |
| L101 | CEHFC0476NN-4 | CE 47U0F +20% 16.0V 85C | |
| IC18 | H01-FB05B3580NN-1 | BEAD AXIAL/TAP,HC3580 80.5ohm | |
| IC40 51 52 | H01-ICKIA7806I2-9 | IC KIA7806AP VOLTQAGE REGULATOR TO-220AB | |
| Y100 | H01-OSXBE14M3AU-7 | IC PHOTOCOUPLER PC-17T1 DIP4 KODENSHI | |
| Y101 | H01-OSXBE17M7AU-9 | CRYSTAL 14.31818MHz WOOIN | |
| SK11 12 | H01-RLL0517811A-A | CRYSTAL 17.734475MHz WOOIN | |
| NJ51 52 53 | H01-SOJW2350SNN-A | RELAY D3009(1-1462033-4) | |
| NJ50 | SOPA96063NN-0 | JACK PHONE 3.6 EP-1401A 1P BK | |
| NJ92 93 94 95 96 97 98 | H01-SORA11Y00NN-5 | JACK D-SUB 9P 87204-6063 W/DUST COVER BK | |
| NJ91 | H01-SORA90GNDNN-8 | JACK RCA 9P JB090148TN GND CAP RDX3,BUX3,GNX3 | |
| NJ81 | H01-SOSS9CKX3NN-9 | JACK PHONE 6.35 H70980110S 9P BK | |
| W101 | H01-WC1160705C1-9 | WCL 070-05-05 UL1007 HOOK-UP 16 70MM BK 5 5 | |
| P605 | H01-WN06AB00000-0 | CONN 2.0MM 6 MA R NAT GT201-6P-LS | |
| P500 | H01-WN06SB00000-8 | CONN 2.0MM 6 MA ST NAT GT201-6P-TS | |
| P604 | H01-WN06SB01000-9 | CNT PLUG BD'BD PLUG 2.0mm 35336-0610 6P | |
| N902 | H01-WN17AB00000-4 | CONN 2.0MM 17 MA R NAT SOCKET MOLEX 35237-1710 0 0 | |
| P901 | H01-WN17SB00000-1 | CONN 2.0MM 17 MA ST NAT MOLEX 35336-1710 0 0 | |
| N602 | H01-WN19AB00000-9 | CONN 2.0MM 19 MA R NAT SOCKET MOLEX 35237-1910 0 0 | |
| P601 | H01-WN19AI00000-2 | CONN 1.25MM 19 FE ANG WH GF120-19S-LS 2794 A6 | |
| P602 603 | H01-WN19SB00000-6 | CONN 2.0MM 19 MA ST NAT MOLEX 35336-1910 0 0 | |
| N800 | H01-WS4265913FN-5 | CNT ASSY 2.0MM 4P 590MM SHIELD 26AWG UL2547 1/3 | |
| | XY0N618M3SW-A | GLUE FURROW W=6MM L=18.3M SS WHITE @ROLL | |
| | XY0P523K000-A | WIRE,IRON,D=0.5MM,N.W=23KG @KG | |
| | XY0P801K000-A | WIRE TIN D=0.8MM N.W=1.0KG @KG | |
| | XY1N209M0DW-4 | GLUE TAPE W=12MM L=9.0M DS WHITE @ROLL | |
| | XY1N218M3SW-4 | GLUE FURROW W=12MML=18.3M SS WHITE @ROLL | |
| | XY1P202K000-1 | WIRE, TIN, D=1.2MM N.W=2.0KG @KG | |
| | XY30155G00-0 | TCE,CLEANER,-301#,V=55GALLON,TYPELESS @GALLON | |
| | XY4N836M5CL-9 | GLUE TRANSPARENT W=48MM L=36.5M @ROLL | |
| | XY6R301K000-0 | BAR,TIN,63/37,N.W=1.0KG @KG | |
| | XYALC01G000-2 | ALCOHOL V=1.0GALLON @GALLON | |
| | XYGLU00K5RD-7 | GLUE, RED, W=0.5KG TYPELESS FOR SMT @KG | |
| | XYRF801G000-7 | FLUX #RF-800 V=1.0 GALLON @ GALLON | |
| | XYWAX10K000-6 | ANTI-OXIDATION,WAX,W-1#,N.W=10KG,@KG | |
| BK50 | H01-ZMC12S16A00-A | BKT GROUND | |
| | 3SA-3072US-VDA-1-1 | AC ESABD IAA VIDEO BD AXIAL AVR630 | |
| D102 104 400 | H01-DG1N04148NB-4 | D-SLP 1N4148 100.0V 150E-3A | |
| D108 | H01-DZ1N5239BNB-A | D-ZENER 1N5239B 9.1V 500MIOW | |
| L100 102 109 | H01-FB05B3580NN-1 | BEAD AXIAL/TAP,HC3580 80.5ohm | |
| L104 105 106 108 110 801 | H01-LAINB0470CR-2 | LF 47U0H +10% 5.8 OHM 500MI0A | |
| L107 | H01-LAINB056ACR-0 | LF 5U60H +10% 5.8 OHM 500MI0A | |
| R131 132 133 134 135 161 162 163 | RC3DI0102IN-9 | RCF 1K0 OHM +5% 250MI0W | |
| R160 | RC3DI0103IN-7 | RCF 10K0 OHM +5% 250MI0W | |
| R204 | RC3DI0121IN-5 | RCF 120R0 OHM +5% 250MI0W | |
| R801 802 | RC3DI022AIN-2 | RCF 2R2 OHM +5% 250MI0W | |
| R203 407 | RC3DI0471IN-0 | RCF 470R0 OHM +5% 250MI0W | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|---|-------------------|--|------|
| 3SA-3072US-VDAR-1-3 | | AC ESABD IAR VIDEO BD RADIAL AVR630 | |
| C142 143 171 174 | CCJIC0390NE-2 | CC 39P0F +5% -5% 50.0V NPO | |
| C183 | CCKIC0103NA-9 | CC 10N0F +10% -10% 50.0V Y5P | |
| C202 | CCKIC0223NN-6 | CC 22N0F +10% -10% 50.0V Z5R | |
| C501 | CEHDC0107NN-5 | CE 100U0F +20% 6.3V 85C 5X11 | |
| C172 186 196 | CEHEC0107NN-9 | CE 100U0F +20% 10.0V 5X11 85C | |
| C100 102 103 105 106 108 109 111 136 138 139 140 203 205 289 295 | CEHEC0227NN-A | CE 220U0F +20% 10.0V 85C | |
| C130 131 132 133 134 135 145 146 147 149 | CEHEC0477MN-A | CE 470U0F +20% 10.0V 6.3X11 85C | |
| C901 902 903 904 905 906 907 908 | CEHFC0106MN-5 | CE 10U0F 16.0V 5X11 P2.5MM | |
| C101 104 107 110 116 122 137 204 206 213 | CEHFC0106NN-4 | CE 10U0F +20% 16.0V 85C 5X11 | |
| C909 910 | CEHFC0107MN-3 | CAP ELEC 100U0F 16.0V M 5X11 P2.5MM | |
| C151 188 190 192 194 291 293 | CEHFC0107NN-2 | CE 100U0F +20% 16.0V 85C | |
| C115 141 153 161 313 | CEHFC0476NN-4 | CE 47U0F +20% 16.0V 85C | |
| C128 164 167 169 | CEHIC0105NN-7 | CE 1U0F +20% 50.0V 5X11 85C | |
| C185 198 | CEHIC0106NN-5 | CE 10U0F +20% 50.0V 85C | |
| C184 201 | CEHIC02255N-0 | CE 2U2F +20% 50.0V 85C 5X11 | |
| C176 | CEHIC0474NN-9 | CE 470N0F +20% 50.0V 85C 5X11 | |
| C503 504 505 506 507 | CEHKC0105MN-5 | CE 1U0F +20% 100.0V 85C | |
| C165 | H01-CEMIC0334AH-4 | CAP ELEC 0.33UF M 5X11 SHL SAMYOUNG | |
| C144 | CPIIC0223NN-4 | CPF 22N0F +10% 50.0V | |
| C168 | CPIIC0682NN-5 | CPF 6N8F +10% 50.0V | |
| Q101 104 111 | H01-TR2SA933ANW-2 | TR-SLPLF 2SA933ASR P -3.0A -20V | |
| Q100 112 114 | H01-TR2SC1740NW-9 | TR-SLPLF 2SC1740S R N 150MI0A 50V | |
| Q107 110 | H01-TRDTC114YNW-6 | TR-SLPLF DTC114YSA N 100MI0A | |
| Q400 501 502 | H01-TRKTA107MNA-7 | TR-SLPSWA KRA107M P | |
| 3SA-3072US-VDST-1-A | | AC ESABD SMD VIDEO BD AVR630 | |
| C163 | CZELII0100BE-0 | CCCFMIC 10P0F +0P5F -0P5F 50.0V NPO | |
| C112 113 114 118 119 120 125 126 155 156 157 158 159 160 178 180 207 921 922 923 924 925 926 927 928 | CZJII0101BE-2 | CCCFMIC 100P0F +5% -5% 50.0V NPO | |
| C123 | CZJII0181BE-0 | CCCFMIC 180P0F +5% -5% 50.0V NPO | |
| C175 | CZJII0270BE-1 | CCCFMIC 27P0F +5% -5% 50.0V NPO | |
| C177 | CZJII0330BE-9 | CCCFMIC 33P0F +5% -5% 50.0V NPO | |
| C124 200 | CZJII0331BE-7 | CCCFMIC 330P0F +5% -5% 50.0V NPO | |
| C173 181 187 197 | CZKII0103BC-5 | CCCFMIC 10N0F +10% -10% 50.0V X7R | |
| C170 | CZKII0561BC-8 | CCCFMIC 560P0F +10% -10% 50.0V X7R | |
| C148 150 154 162 189 191 193 195 248 292 294 311 401 502 508 509 801 804 911 912 913 914 915 916 917 918 | CZZFI0104BF-8 | CCCFMIC 100N0F +80% -20% 16.0V Y5V | |
| D101 106 107 109 110 501 502 503 504 505 506 507 801 802 | H01-DS1S50094NB-A | D-SLP 1SS355 35.0V 225MI0A | |
| L501 502 503 504 | H01-FB2K52012NN-5 | FBEAD SURFACE MT 2500OHM FCM2012H-252T02 | |
| IC16 | H01-ICBU4053BB4-7 | IC BU4053BCF SOP16 ANALOG MPX/DEMPX | |
| IC19 20 | H01-ICBU4094BD3-2 | IC CMOS BU4094BF SOP16 | |
| IC22 | H01-ICLC74763I4-1 | IC OSD LC74763M SOP30 | |
| IC901 902 903 904 | H01-ICLM02068D2-A | IC-OPERAMP NJM2068M DUAL SOP8 | |
| IC14 25 26 | H01-ICMM1501XDL-A | IC-VIDEO SW MM1501XNRE SOT-26B | |
| IC13 15 23 | H01-ICMM1505XDL-3 | IC-VIDEOOPROC MM1505XNRE AMPLIFIER&DRIVER | |
| IC27 | H01-ICMM1511XDL-8 | IC-VIDEO SW MM1511XNRE SOT-26B | |
| IC10 11 12 | H01-ICNJM2296D3-7 | IC-LINEAR NJM2296 | |
| IC17 | H01-ICTSH95IDB4-6 | IC-VIDEOOPROC TSH95ID VIDEO AMPLIFIER | |
| IC50 | H01-ICUPD4721D8-3 | IC-SPECFUNC UPD4721 DRIVERS/RECEIVERS CMOS RS-232C | |
| R137 | RS1AD1620NA-3 | RMGCFMIC 162R0 OHM +1% 62MI5W | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|--|-------------------|--------------------------------------|------|
| J101 104 105 106 108 125 126 128 132 135 138 139 234 257 308 309 310 315 316 317 911 912 913 914 915 916 R157 158 170 184 921 922 923 924 925 926 927 928 | RS3AD0000NA-0 | RMGCFMIC 0 OHM +0% 62MI5W | |
| R190 | RS3AD0101NA-5 | RMGCFMIC 100R0 OHM +5% 62MI5W | |
| R130 148 149 176 183 | RS3AD0102NA-3 | RMGCFMIC 1K0 OHM +5% 62MI5W | |
| R112 113 114 118 119 120 124 125 126 142 143 144 145 159 165 175 188 199 206 207 208 | RS3AD0103NA-1 | RMGCFMIC 10K0 OHM +5% 62MI5W | |
| R510 941 942 943 944 945 946 947 948 | RS3AD0104NA-A | RMGCFMIC 100K0 OHM +5% 62MI5W | |
| R153 155 | RS3AD0105NA-8 | RES CHIP 1M 1/16W +-5% 0603 | |
| R150 154 156 | RS3AD0121NA-A | RMGCFMIC 120R0 OHM +5% 62MI5W | |
| R146 147 | RS3AD0123NA-6 | RMGCFMIC 12K0 OHM +5% 62MI5W | |
| R186 | RS3AD0124NA-4 | RMGCFMIC 120K0 OHM +5% 62MI5W | |
| R931 932 933 934 935 936 937 938 | RS3AD0151NA-1 | RMGCFMIC 150R0 OHM +5% 62MI5W | |
| R152 202 | RS3AD0152NA-A | RMGCFMIC 1K5 OHM +5% 62MI5W | |
| R171 198 | RS3AD0154NA-6 | RMGCFMIC 150K0 OHM +5% 62MI5W | |
| R167 173 | RS3AD0222NA-4 | RMGCFMIC 2K2 OHM +5% 62MI5W | |
| R139 140 141 | RS3AD0223NA-2 | RMGCFMIC 22K0 OHM +5% 62MI5W | |
| R187 | RS3AD0224NA-0 | RMGCFMIC 220K0 OHM +5% 62MI5W | |
| R192 | RS3AD0243NA-7 | RMGCFMIC 24K0 OHM +5% 62MI5W | |
| R200 511 | RS3AD0271NA-2 | RMGCFMIC 270R0 OHM +5% 62MI5W | |
| R193 | RS3AD0272NA-0 | RMGCFMIC 2K7 OHM +5% 62MI5W | |
| R177 | RS3AD0330NA-1 | RMGCFMIC 33R0 OHM +5% 62MI5W | |
| R136 138 178 181 | RS3AD0331NA-A | RMGCFMIC 330R0 OHM +5% 62MI5W | |
| R166 172 | RS3AD0333NA-6 | RMGCFMIC 33K0 OHM +5% 62MI5W | |
| R189 406 504 | RS3AD0392NA-1 | RMGCFMIC 3K9 OHM +5% 62MI5W | |
| R201 | RS3AD0430NA-8 | RMGCFMIC 43R0 OHM +5% 62MI5W | |
| R508 512 | RS3AD0470NA-7 | RMGCFMIC 47R0 OHM +5% 62MI5W | |
| R503 | RS3AD0471NA-5 | RMGCFMIC 470R0 OHM +5% 62MI5W | |
| R501 502 | RS3AD0472NA-3 | RMGCFMIC 4K7 OHM +5% 62MI5W | |
| R405 509 513 | RS3AD0473NA-1 | RMGCFMIC 47K0 OHM +5% 62MI5W | |
| R180 | RS3AD0511NA-8 | RMGCFMIC 510R0 OHM +5% 62MI5W | |
| R197 | RS3AD0513NA-4 | RMGCFMIC 51K0 OHM +5% 62MI5W | |
| R101 104 107 110 116 122 127 128 129 168 174 | RS3AD0680NA-7 | RMGCFMIC 68R0 OHM +5% 62MI5W | |
| R151 | RS3AD0682NA-3 | RMGCFMIC 6K8 OHM +5% 62MI5W | |
| R100 102 103 105 106 108 109 111 115 117 121 123 182 | RS3AD0750NA-1 | RMGCFMIC 75R0 OHM +5% 62MI5W | |
| R185 | RS3AD0820NA-6 | RMGCFMIC 82R0 OHM +5% 62MI5W | |
| R169 | RS3AD0822NA-2 | RMGCFMIC 8K2 OHM +5% 62MI5W | |
| Q102 103 | H01-TRDTA114YNI-9 | TR-SSD DTA114YKA P 10K0 OHM 47K0 OHM | |
| Q105 106 113 | H01-TRDTC114YNI-5 | TR-SSD DTC114YKA N 10K0 OHM 47K0 OHM | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|----------------------------|--|-------------|------|
| 3SA-3071US-BC00-1-6 | AC MECH BOM AVR430 HARMAN OEM | | |
| H01-FBB0102AA00-7 | FCORE FERRIT MAGNET SRH9. 9X20. 0X5. 1+CASE W5 | | |
| H01-SWA2B21PDA&-7 | SW PUSH POWER SDDLB15700 | | |
| H01-TXPWMM430B0-8 | MN X'FORMER AVR430 120V | BK | |
| H01-TXPWMMMD01B0-8 | MN X'FORMER AVR430EU 230V | IB | |
| H01-WF19N2605FU-9 | FFC-JUMPER 19X 1.25MM 260MM | | |
| H01-WF23N2705FU-A | FFC-JUMPER 23X 1.25MM 270MM | | |
| H01-WF4261805BN-1 | WIRECONASY DL 2.0MM 4P 180MM UL 1007 RIBBON 26 1 | | |
| H01-WF9262205BN-3 | WIRECONASY DL 2.0MM 9P 220MM UL 1007 RIBBON 26 1 | | |
| H01-WG03SE85300-0 | WIRECONASY DL 3.96MM 2P 530MM UL1007 RIBBON 16 1 | | |
| XY1N033M0DW-3 | DOUBLE SIDE TAPE #Y-4615 (3M) | | |
| XY1N209M0DW-4 | GLUE TAPE W=12MM L=9.0M DS WHITE @ROLL | | |
| XY1N218M3SW-4 | GLUE FURROW W=12MML=18.3M SS WHITE @ROLL | | |
| XY1N250M0CL-5 | GLUE,TRANSPARENT,CANDY STRIP,W=12MM,L=50M @M | | |
| XY1N250M0DW-4 | GLUE,TAPE,#9070,W=12MM,L=50,DOUBLE-SIDE,WHITE. @METER | | |
| XY2N450M0DW-6 | GLUE,TAPE,#9070,W=24MM,L=50,DOUBLE-SIDE,WHITE. @METER | | |
| XY501110CRD-2 | GLUE, RED #AK-501 F/SCREW V=110CC @BOTTLE | | |
| XYALC01G000-2 | ALCOHOL V=1.0GALLON @GALLON | | |
| XYEM501K000-2 | SPECIALTY LUBRICANTS GREASE,#EM-50L,W=1KG @G | | |
| XYGLAA5K200-3 | GLASS CLEANER,N.W=0.52KG @BOTTLE | | |
| XYKIFA4L500-1 | KIF VEG LIQUID CAR WAX,V=0.445 L @BOTTLE | | |
| XYVAS00K500-6 | VASOGEN,YELLOW,N.W=0.5KG @BOTTLE | | |
| ZFNR12062SB-8 | RUBBER SIDE | | |
| ZFNR12072SB-5 | RUBBER SIDE | | |
| ZFNR13830SB-6 | RUBBER SIDE | | |
| ZFNR19720SB-5 | RUBBER FOOT 19.7X19.7X2T BK | | |
| ZKC1030HA00-6 | LABEL SERIAL AVR430 | BK | |
| ZKD0130HA00-A | LABEL SERIAL AVR430 EU | IB | |
| ZKC1073HA00-7 | LABEL BARCODE AVR430 | BK | |
| ZKD0173HA00-0 | LABEL BARCODE AVR430 EU | IB | |
| ZKC1095HA00-0 | LABEL LICENSE AVR430 | | |
| ZKC1222HA00-2 | LABEL RISK | | |
| ZKC1229HA00-7 | LABEL DATE | | |
| ZKC1281HA00-9 | LABEL QC CHECK | | |
| ZKGEN29HA00-8 | LABEL DATE BLANK | | |
| ZKGEN30HA00-6 | LABEL SERIAL BLANK | | |
| ZKGEN73HA00-7 | LABEL BARCODE BLANK | | |
| ZKGEN97HA00-3 | LABEL MAIN POWER REMIND | | |
| H01-ZMB01S00100-5 | BKT HEADPHONE JACK | | |
| H01-ZMB01S02200-9 | SPRING PLATE GND C5212 0.2T | | |
| H01-ZMC10HS0100-7 | H/SINK AMP AVR430 | | |
| H01-ZMC10S01A00-0 | PANEL REAR AVR430 | BK | |
| H01-ZMD01S01A00-8 | PANEL REAR AVR430 EU | IB | |
| H01-ZMC11HS0200-7 | H/SINK MAIN AVR630 | | |
| H01-ZMC11S00200-0 | AL DOOR AVR430/630 | | |
| H01-ZMC11S00300-2 | AL PANEL AVR430/630 | | |
| H01-ZMC11S04A00-1 | BKT HINGE AVR430/630 LEFT | | |
| H01-ZMC11S04B00-3 | BKT FRAME GUIDE | | |
| H01-ZMC11S05B00-4 | BKT HINGE AVR430/630 RIGHT | | |
| H01-ZMC11S06A00-3 | SPRING STOPPER AVR430/630 | | |
| H01-ZMC11S07A00-4 | CHASSIS FRONT AVR430/630 | | |
| H01-ZMC11S08A00-5 | COVER TOP AVR430/630 | | |
| H01-ZMC11S09A00-6 | BKT FAN FRONT AVR430/630 | | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|-------------------|--------------------------------------|-------------|------|
| H01-ZMC11S10A00-6 | BKT FAN REAR AVR430/630 | | |
| H01-ZMC11S12A00-8 | CAP BUTTON STAND-BY AVR430/630 | | |
| H01-ZMC11S13A00-9 | CHASSIS MAIN AVR430/630 | | |
| H01-ZMC11S14A00-A | BRACKET DOOR | | |
| H01-ZMC12S07A00-2 | COVER BOTTOM | | |
| H01-ZMC12S08B00-5 | BKT TRANS BOTTOM | | |
| H01-ZMC12S09A00-4 | BKT HEATSINK | | |
| ZMC12S13AYE-1 | STANDOFF HEX M4X0.7 6X31.9H | | |
| ZMC12S14AYE-9 | STANDOFF HEX M4X0.7 6X61.9H | | |
| ZMC12S15AYE-6 | STANDOFF HEX M4X0.7 6X111.2H | | |
| H01-ZMC12S19A00-2 | BKT AC INLET | | |
| H01-ZMC12S20A00-2 | BADGE AL HARMAN/KARDON SILVER | | |
| H01-ZMGEN00GAGY-0 | AL LOGO BADGE TOP | | |
| ZNSSM4045HZ-4 | NUT M4 HEXAGON CIRCULAR EXTERNAL | | |
| ZPC1001GBGY-0 | PANEL FRONT AVR430 | BK | |
| ZPD0101GBGY-4 | PANEL FRONT AVR430EU | IB | |
| ZPC1002GAGY-9 | DOOR AVR430/630 | | |
| ZPC1003GAGY-5 | BUTTON POWER | | |
| H01-ZPC1004GASG-0 | BUTTON 7 KEY | BK | |
| H01-ZPD0104GASG-8 | BUTTON 7 KEY EU | IB | |
| ZPC1005GAGY-8 | BUTTON 8 KEY | | |
| ZPC1006GAWH-0 | BUTTON STANDBY | | |
| ZPC1007GAMW-9 | INDICATOR STAND-BY | | |
| ZPC1016GAMW-8 | KNOB VOLUME AVR630 | | |
| ZPC1017GABK-6 | HOLDER VFD AVR430/630 | | |
| H01-ZPC1018GART-7 | FILTER VFD | | |
| H01-ZPC1020GACR-2 | CAP KNOB VOLUME AVR630 | | |
| H01-ZPC1021GASG-4 | COVER KNOB VOLUME AVR430/630 | | |
| H01-ZPC1022GABT-3 | WINDOW DISPLAY AVR430 | | |
| ZPC1103GAGY-A | FOOT 50MM 15.8MM | | |
| ZSMCM4008BY-1 | SCREW BM 4X8 | | |
| ZSMCM4010BB-5 | SCREW BM 4X10 | | |
| ZSTBM3008BY-1 | SCREW ST BH 3X8 | | |
| ZSTBM3010BB-5 | SCREW ST BH 3X10 | | |
| ZSTBM3012BY-A | SCREW ST BH 3X12 PIVOT | | |
| ZSTGM3010BB-3 | SCREW ST BH 3X10 GROUND | | |
| ZSTWM3006BB-3 | SCREW ST WPH 3X6 | | |
| ZSTWM3008BY-8 | SCREW ST WPH 3X8 | | |
| ZSTWM3A08BY-6 | SCREW ST W7.5PH 3X8 | | |
| ZSTWM4008BC-3 | SCREW ST WPH 4X8 SILVER CHROM | | |
| ZTB017030AA-4 | CABLE TIE 100MM NYLON 6 | | |
| ZUC1201AABK-7 | SPONGE 30X30X10T BK | | |
| ZV4P00030TH-3 | HEAT SHRINK TUBE L30MM*D4.0MM*T0.5MM | | |
| H01-ZVC11DWT100-3 | TAPE DOOR | | |
| H01-ZVC11DWT200-5 | TAPE PANEL | | |
| H01-ZVC11FAN100-6 | FAN JF0925S1L | | |
| ZVC11FILM0A-A | PROTECTION FILM | | |
| ZVC11FLT100-9 | FELT COVER PANEL | | |
| ZVC11FLT200-7 | FELT COVER KNOB | | |
| H01-ZVC11GEAR01-A | DAMPER GEAR DP120 | | |
| H01-ZVC11TUNE01-7 | TUNER MODULE KST-MB011MW0-81 US | BK | |
| H01-ZVD01TUNE00-2 | TUNER MODULE KST-MB114MW1-81 OEM EU | IB | |
| ZWF793008PO-5 | WASHER FIBER 3 0.8T | | |
| ZWM623108SZ-2 | WASHER SPRING 3 | | |
| ZWM763109SZ-2 | AC SPRING WASHER RT2250(PAV5005) | | |
| ZWM803305PZ-1 | WASHER PLAIN 3 | | |
| ZWMC04810PZ-5 | WASHER PLAIN 4 | | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|--|----------------------------|--|------|
| | 3SA-3071US-DGMI-1-5 | AC EMBD IMA DSP BD AVR430 | |
| C657 | PBC11KDGB21-0 | AVR630 DSP DUAL PCB 209MM*170MM | |
| REWORK TO C719 | CEZXA0479MN-5 | CM 47M10F +80% -20% 5.5V 70C | |
| IC601 | CZKII0103BC-5 | CCCFMIC 10N0F +10% -10% 50.0V X7R | |
| T701 | H01-ICKA78R08I2-4 | IC-KA78R08API TO-220IS-4PIN | |
| Y800 | H01-LF11030A2NA-4 | TFPULSE TRANSFORMER 110UH FP-110 FERRIT MAGNET | |
| Y600 | H01-OSCEM24M5RU-A | VCXO 24M576 HZ +50 PPM -50 PPM 0 OHM 3.3V | |
| | H01-OSCNI20MOCU-6 | CSTLS20MOX51-B0 | |
| | RC3DI022AIN-2 | RCF 2R2 OHM +5% 250MI0W | |
| | RC3DI033AIN-6 | RCF 3R3 OHM +5% 250MI0W | |
| NJ4 | H01-SORA103LNNN-5 | CON PHONO SCKT RCA 1P W/GND JE010003LN OG | |
| NJ5 | H01-SORA21502NN-2 | CON PHONO SCKT RCA 2P W/GND CAP JW-1502SN OO | |
| NJ72 | H01-SORA40RSANN-6 | JACK RCA 4P JB040131ZN GN BN PP TA | |
| NJ71 | H01-SORA40RSCNN-A | JACK RCA 4P JB040131QN WH BU RD GY | |
| NJ74 75 | H01-SOTOR179LBA-0 | D-LEM TORX-179L | |
| NJ76 | H01-SOTOT179LBA-7 | D-LEM TOTX-179L | |
| REWORK | H01-WC1181505C1-8 | WCL 150-05-05 UL1007 HOOK-UP 18 150MM BK 5 5 | |
| REWORK | H01-WC1260405C1-1 | WCL 040-05-05 UL1007 HOOK-UP 26 040MM BK 5 5 | |
| REWORK | H01-WC1260705C1-6 | WCL 070-05-05 UL1007 HOOK-UP 26 070MM BK 5 5 | |
| REWORK | H01-WC1261155C1-0 | WCL 115-05-05 UL1007 HOOK-UP 26 115MM BK 5 5 | |
| W3~W3-1 W4~W4-1 | H01-WC1261305C1-2 | WCL 130-05-05 UL1007 HOOK-UP 26 130MM BK 5 5 | |
| N405 | H01-WG06SB83000-8 | CNT ASSY 2.0MM 6P 300MM RIBBON 26AWG UL1007 | |
| P1 | H01-WN05SB00000-0 | CONN 2.0MM 5 MA ST NAT GT201-5P-TS | |
| N408 | H01-WN06AB00001-4 | CNT PLUG BD'BD SOCKET 2.0mm 35237-0610 | |
| P403 | H01-WN09SB00000-A | CONN 2.0MM 9 MA ST NAT GT201-9P-TS | |
| N407 | H01-WN11SB00000-8 | CONN 2.0MM 11P MA ST NAT MOLEX 35336-1110 0 0 | |
| N404 | H01-WN17SB00000-1 | CONN 2.0MM 17 MA ST NAT MOLEX 35336-1710 0 0 | |
| N403 | H01-WN19AB00000-9 | CONN 2.0MM 19 MA R NAT SOCKET MOLEX 35237-1910 0 0 | |
| N401 | H01-WN19SB00000-6 | CONN 2.0MM 19 MA ST NAT MOLEX 35336-1910 0 0 | |
| N406 | H01-WN23AI000WH-9 | CONN 1.25MM 23 FE ANG WH GF120-23S-LS 2794 A6 | |
| | XY0N618M3SW-A | GLUE FURROW W=6MM L=18.3M SS WHITE @ROLL | |
| | XY0P801K000-A | WIRE TIN D=0.8MM N.W=1.0KG @KG | |
| | XY1N209M0DW-4 | GLUE TAPE W=12MM L=9.0M DS WHITE @ROLL | |
| | XY1N218M3SW-4 | GLUE FURROW W=12MM L=18.3M SS WHITE @ROLL | |
| | XY1P202K000-1 | WIRE, TIN, D=1.2MM N.W=2.0KG @KG | |
| | XY30155G00-0 | TCE,CLEANER,-301#,V=55GALLON,TYPELESS @GALLON | |
| | XY4N836M5CL-9 | GLUE TRANSPARENT W=48MM L=36.5M @ROLL | |
| | XY6R301K000-0 | BAR,TIN,63/37,N.W=1.0KG @KG | |
| | XYALC01G000-2 | ALCOHOL V=1.0GALLON @GALLON | |
| | XYGLU00K5RD-7 | GLUE, RED, W=0.5KG TYPELESS FOR SMT @KG | |
| | XYJUI00K5GY-5 | JUICE TIN N=0.5KG GREY @KG | |
| | XYRF801G000-7 | FLUX #RF-800 V=1.0 GALLON @ GALLON | |
| | XYWAX10K000-6 | ANTI-OXIDATION,WAX,W-1#,N.W=10KG,@KG | |
| | 3SA-3071US-DGAA-1-3 | AC ESABD IAA TOP DSP BD AVR430 | |
| L600 | H01-LAINB047ACR-3 | LF 4U7H +10% 1.7 OHM 190.0A | |
| R619 | RC3DI010AIN-1 | RCF 1R0 OHM +5% 250MI0W | |
| | 3SA-3071US-DGAR-1-5 | AC ESABD TOP IAR DSP BD AVR430 | |
| C472 473 474 | CEHDC0108NN-3 | CE 1M10F +20% 6.3V 8X11.5 85C | |
| C231 232 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 456 457 458 459 460 461 462 463 613 620 621 727 729 731 733 735 | CEHFC0106MN-5 | CE 10U0F 16.0V 5X11 P2.5MM | |
| C233 470 471 618 630 723 800 807 811 820 822 828 830 | CEHFC0107MN-3 | CAP ELEC 100U0F 16.0V M 5X11 P2.5MM | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|--|----------------------------|--|------|
| C627 | CEHFC0476MN-5 | CE 47U0F +20% 16.0V 5X11 P2.5MM | |
| C619 | CEHIC0104MN-A | CE 100N0F +20% 50.0V 85C SSE TYPE | |
| C806 | CEHIC0225NN-8 | CE 2U2F +20% 50.0V 85C 2.5MM | |
| C725 | CEHIC0475NN-7 | CE 4U7F +20% 50.0V 85C | |
| Q611 | H01-TRMPSA06NNA-4 | TR-SLPLF MPSA06 N 500MI0A TO-92 | |
| | 3SA-3071US-DGSB-1-6 | AC ESABD SMD BOT DSP BD AVR430 | |
| C606 608 611 615 | CZJII0101BE-2 | CCCFMIC 100P0F +5% -5% 50.0V NP0 0603 | |
| C432 433 444 445 | CZJII0471BE-2 | CCCFMIC 470P0F +5% -5% 50.0V NP0 | |
| C434 435 436 437 438 439 440 441 442 443 446 447 | CZJII0561CE-0 | CCCFMIN 560P0F +5% -5% 50.0V NP0 0805 | |
| C720 | CZKGI0183BC-6 | CAP CHIP 18NF 25V +/-10% 0603 X7R | |
| C721 | CZKII0102BC-7 | CCCFMIC 1N0F +10% -10% 50.0V X7R 0603 | |
| C709 711 716 997 998 | CZKII0103BC-5 | CCCFMIC 10N0F +10% -10% 50.0V X7R | |
| C416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 | CZKII0272BC-4 | CCCFMIC 2N7F +10% -10% 50.0V X7R | |
| C116 117 612 614 617 622 624 628 705 707 708 710 715 719 722 724 726 728 730 732 734 742 801 802 808 809 810 814 815 816 818 819 821 829 | CZZFI0104BF-8 | CCCFMIC 100N0F +80% -20% 16.0V Y5V | |
| D400 401 600 601 604 651 | H01-DS1S50094NB-A | D-SLP 1SS355 35.0V 225MI0A | |
| L1 700 701 704 803 | H01-FB2K52012NN-5 | FBEAD SURFACE MT 2500OHM FCM2012H-252T02 | |
| R728 880 | | | |
| L707 708 | H01-FB3002012NN-4 | FBEAD SURFACE MT 3000OHM FCM2012V-301T07 | |
| JUM1 2 R6 7 8 | RS3AD0000NA-0 | RMGCFMIC 0 OHM +0% 62MI5W | |
| R708 731 733 734 745 | RS3AD0100NA-7 | RMGCFMIC 10R0 OHM +5% 62MI5W | |
| R632 711 730 732 | RS3AD0101NA-5 | RMGCFMIC 100R0 OHM +5% 62MI5W | |
| R631 712 713 | RS3AD0102NA-3 | RMGCFMIC 1K0 OHM +5% 62MI5W | |
| R5 | RS3AD0103NA-1 | RMGCFMIC 10K0 OHM +5% 62MI5W | |
| R448 449 450 451 452 453 454 455 | RS3AD0104NA-A | RMGCFMIC 100K0 OHM +5% 62MI5W | |
| R416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 | RS3AD0122NA-8 | RMGCFMIC 1K2 OHM +5% 62MI5W | |
| R657 | RS3AD0200NA-3 | RES,CHIP 20 OHM 1/16W +/-5% 0603 | |
| R729 804 | RS3AD0221NA-6 | RMGCFMIC 220R0 OHM +5% 62MI5W | |
| R744 876 877 878 | RS3AD0332NA-8 | RMGCFMIC 3K3 OHM +5% 62MI5W | |
| R400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 | RS3AD0432NA-4 | RMGCFMIC 4K3 OHM +5% 62MI5W | |
| R651 652 653 | RS3AD0472NA-3 | RMGCFMIC 4K7 OHM +5% 62MI5W | |
| R623 | RS3AD0473NA-1 | RMGCFMIC 47K0 OHM +5% 62MI5W | |
| R456 457 458 459 460 461 462 463 | RS3AD0561NA-4 | RMGCFMIC 560R0 OHM +5% 62MI5W | |
| R432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 | RS3AD0562NA-2 | RMGCFMIC 5K6 OHM +5% 62MI5W | |
| R710 | RS3AD0621NA-1 | RMGCFMIC 620R0 OHM +5% 62MI5W | |
| R709 | RS3AD0681NA-5 | RMGCFMIC 680R0 OHM +5% 62MI5W | |
| NJ13 14 | RS3AY0103NA-7 | RCA 10K0 OHM +5% 62M15W 4 | |
| NJ15 16 | RS3AY0332NA-3 | RCA 3K3 OHM +5% 62M15W 4 | |
| L800 JUM5 6 7 11 12 13 14 15 16 17 18 19 20 | RS3BB0000NA-5 | RMGCFMIN 0 OHM +5% 100MI0W 0805 | |
| Q600 601 604 605 606 607 608 609 612 613 | H01-TRDTC114YNI-5 | TR-SSD DTC114YKA N 10K0 OHM 47K0 OHM | |
| | 3SA-3071US-DGST-1-1 | AC ESABD TOP SMD DSP BD AVR430 | |
| C100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 235 236 237 238 616 625 626 | CZJII0101BE-2 | CCCFMIC 100P0F +5% -5% 50.0V NP0 0603 | |
| C700 702 743 | CZJII0220BE-5 | CCCFMIC 22P0F +5% -5% 50.0V NP0 | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|--|--------------------|--|------|
| C853 | CZJII0221BE-3 | CCCFMIC 220P0F +5% -5% 50.0V NPO | |
| C491 492 493 494 | CZJII0470BE-4 | CCCFMIC 47P0F +5% -5% 50.0V NPO 0603 | |
| C851 | CZJII0471BE-2 | CCCFMIC 470P0F +5% -5% 50.0V NPO | |
| C243 244 | CZKII0102BC-7 | CCCFMIC 1N0F +10% -10% 50.0V X7R 0603 | |
| C703 706 717 | CZKII0103BC-5 | CCCFMIC 10N0F +10% -10% 50.0V X7R | |
| C804 | CZKII0122BC-1 | CCCFMIC 1N2F +10% -10% 50.0V X7R 0603 | |
| C805 | CZKII0680BE-7 | CCCFMIC 68P0F +10% -10% 50.0V NPO | |
| C234 239 240 241 242 448 449 450 451 452 453 454 455 629 714 718 803 891 899 | CZZFI0104BF-8 | CCCFMIC 100N0F +80% -20% 16.0V Y5V | |
| D603 605 606 | H01-DS1S50094NB-A | D-SLP 1SS355 35.0V 225MI0A | |
| L703 802 804 805 R879 | H01-FB2K52012NN-5 | FBEAD SURFACE MT 2500OHM FCM2012H-252T02 | |
| L705 R735 | H01-FB3002012NN-4 | FBEAD SURFACE MT 3000OHM FCM2012V-301T07 | |
| IC804 | H01-IC49L8192I5-A | IC-FLASH MEMORY ROM AT49LV8192A 70ns | |
| IC801 | H01-IC74V244MG5-3 | IC-LOGIC 74VHCT244A INVERTER CMOS | |
| IC802 | H01-IC74VC244G5-6 | IC-LOGIC 74VHC244A INVERTER CMOS | |
| IC602 | H01-ICBU4094BD3-2 | IC CMOS BU4094BF SOP16 | |
| IC700 | H01-ICCS42528EC-0 | IC-CODEC CS42528CQ | |
| IC800 | H01-ICCS49400ED-3 | IC-DSP CS494003-CQ LQFP144 | |
| IC600 | H01-ICD703033E1-54 | IC-MICOM FLASH NEC UPD70F3033BGF 0228KK001 JAPAN QFP100 | |
| IC805 | H01-ICK4S1616M6-9 | IC-SDRAM K4S161622E-TC70 OR TC80 | |
| IC116 117 400 401 402 404 | H01-ICLM02068D2-A | IC-OPERAMP NJM2068M DUAL SOP8 | |
| IC603 | H01-ICM24C04WD2-1 | IC-EEPROM M24C04WMN6T | |
| IC701 702 | H01-ICM74H04MD4-2 | IC-LOGIC M74HCU04M1R INVERTER HCT | |
| IC803 | H01-ICNUJU6324D2-3 | IC-SPECFUNC NJU6324M SOP8 CMOS CRYSTAL | |
| R717 | RS3AD0000NA-0 | RMGCFMIC 0 OHM +0% 62MI5W | |
| R600 601 602 603 604 605 | RS3AD0100NA-7 | RMGCFMIC 10R0 OHM +5% 62MI5W | |
| R715 | RS3AD0101NA-5 | RMGCFMIC 100R0 OHM +5% 62MI5W | |
| R100 101 102 103 104 106 107 606 607 608 609 610 617 618 626 627 628 629 630 | RS3AD0102NA-3 | RMGCFMIC 1K0 OHM +5% 62MI5W | |
| R238 239 240 241 242 243 611 612 616 621 624 655 656 658 659 802 868 869 871 872 873 874 | RS3AD0103NA-1 | RMGCFMIC 10K0 OHM +5% 62MI5W | |
| R654 | RS3AD0103NA-1 | RMGCFMIC 10K0 OHM +5% 62MI5W | BK |
| R614 | RS3AD0103NA-1 | RMGCFMIC 10K0 OHM +5% 62MI5W | IB |
| R622 702 706 724 | RS3AD0104NA-A | RMGCFMIC 100K0 OHM +5% 62MI5W | |
| R244 245 246 247 | RS3AD0151NA-1 | RMGCFMIC 150R0 OHM +5% 62MI5W | |
| R234 235 | RS3AD0203NA-8 | RMGCFMIC 20K0 OHM +5% 62MI5W | |
| R746 801 | RS3AD0221NA-6 | RMGCFMIC 220R0 OHM +5% 62MI5W | |
| R725 736 738 | RS3AD0222NA-4 | RMGCFMIC 2K2 OHM +5% 62MI5W | |
| R108 109 110 111 112 114 115 | RS3AD0223NA-2 | RMGCFMIC 22K0 OHM +5% 62MI5W | |
| R901 | RS3AD0270NA-4 | RES,CHIP 27 OHM 1/16W +/-5% 0603 | |
| R870 | RS3AD0302NA-6 | RMGCFMIC 3K0 OHM +5% 62MI5W | |
| R2 875 | RS3AD0332NA-8 | RMGCFMIC 3K3 OHM +5% 62MI5W | |
| R803 | RS3AD0391NA-3 | RMGCFMIC 390R0 OHM +5% 62MI5W | |
| R105 236 237 1 4 625 | RS3AD0472NA-3 | RMGCFMIC 4K7 OHM +5% 62MI5W | |
| R232 233 613 620 727 737 739 | RS3AD0473NA-1 | RMGCFMIC 47K0 OHM +5% 62MI5W | |
| R704 726 743 | RS3AD0561NA-4 | RMGCFMIC 560R0 OHM +5% 62MI5W | |
| R113 | RS3AD0682NA-3 | RMGCFMIC 6K8 OHM +5% 62MI5W | |
| R700 705 723 | RS3AD0750NA-1 | RMGCFMIC 75R0 OHM +5% 62MI5W | |
| NJ17 18 19 | RS3AY0103NA-7 | RCA 10K0 OHM +5% 62M15W 4 | |
| NJ1 10 11 2 3 6 7 8 9 | RS3AY0470NA-2 | RCA 47R0 OHM +5% 62M15W 4 | |
| JUM3 4 8 9 10 | RS3BB0000NA-5 | RMGCFMIN 0 OHM +5% 100MI0W 0805 | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|-------------------------------------|----------------------------|---|------|
| | 3SA-3071US-FCMI-1-A | AC EMBD IMA FRONT BD AVR430 | |
| C131 | PBC11KFCI21-1 | AVR630 FRONT SINGLE PCB 400MM*163MM FR-1 | |
| CA11 | CEHFC0476DH-4 | CE 47U0F +20% 16.0V 85C | |
| D703 704 705 706 707 708 709 710 | CFMVA0104NN-2 | CPPMX 100NOF +20% -20% | |
| D800 | H01-DL30B2015AA-A | D-LEM 30B3-20-15 GaN SUPER BLUE WATER CLEAR 15 | |
| RM100 | H01-DL3BA05V0BA-2 | D-LEM BLUE/AMBER 3PIE RD RND CL | |
| NJ80 | H01-ICRPM6938NN-3 | IC-REMOTE RPM6938-RSIP-A3 RECEIVER 38KHZ | |
| NJ81 | H01-SORA3313PNN-3 | CON PHONO SCKT RCA-313P 3 PINS | |
| NS199 | H01-SORA8OSC5N8-2 | JACK S-VIDEO 1P C40160261N | |
| VR100 | H01-SOXA27014NN-9 | CON MAINS INLET A/C INLET 7014-NGP | |
| DP10 | H01-SWE3A0505S1-9 | SWIROT EC16B24204 5V 500U0A 10T 3P 0 0 | |
| W200 201 | H01-VDHCA18LL03-7 | FL HCA-18LL03 | |
| N101~P101 | H01-WG01S083000-8 | WIRECONASY UNIQUE 1P 300MM UL1007 PVC DISCRETE 22 2 | |
| N102 | H01-WG03AB80900-2 | WIRECONASY DL 2.0MM 03P 90MM ANG UL1007 RIBBON 26 1 B2011HR2 | |
| N110 | H01-WG04SB82200-6 | WIRECONASY DL 2.0MM 04P 220MM UL1007 RIBBON 26 1 | |
| P199 | H01-WG07SD84000-4 | WIRECONASY DL 2.5MM 07P 400MM UL1007 RIBBON 24 1 | |
| P121 | H01-WN02SE00000-6 | CON 3.96MM PITCH HEADER 2 POS MOLEX 35328-0210 | |
| P120 | H01-WN11AB00000-0 | CONN 2.0MM 11 MA R NAT SOCKET MOLEX 35237- 1110 0 0 | |
| P123 | H01-WN11SB00000-8 | CONN 2.0MM 11P MA ST NAT MOLEX 35336-1110 0 0 | |
| P105 | H01-WN19AB00000-9 | CONN 2.0MM 19 MA R NAT SOCKET MOLEX 35237- 1910 0 0 | |
| P122 | H01-WN19AI00000-2 | CONN 1.25MM 19 FE ANG WH GF120-19S-LS 2794 A6 | |
| P103 | H01-WN19SB00000-6 | CONN 2.0MM 19 MA ST NAT MOLEX 35336-1910 0 0 | |
| N107 | H01-WN23AI000WH-9 | CONN 1.25MM 23 FE ANG WH GF120-23S-LS 2794 A6 | |
| N103 | H01-WS4264822EN-4 | WIRECONASY DL 2.0MM 04P 480MM UL1533 SHIELD 26 1 2/2 | |
| | XY0N211N5WH-4 | WIRECONASY DL 2.0MM 6P 510MM UL1533 SHIELD 26 1 | |
| | XY0N618M3SW-A | CABLE TIE W=0.2MM L=11.5CM WHITE @ STRIP | |
| | XY0P523K000-A | GLUE FURROW W=6MM L=18.3M SS WHITE @ROLL | |
| | XY0P801K000-A | WIRE,IRON,D=0.5MM,N.W=23KG @KG | |
| | XY1N127N0WH-5 | WIRE TIN D=0.8MM N.W=1.0KG @KG | |
| | XY1N209M0DW-4 | ADHESIVE WHITE D=1.1CM L=27CM @KG | |
| | XY1N218M3SW-4 | GLUE TAPE W=12MM L=9.0M DS WHITE @ROLL | |
| | XY1N250M0DW-4 | GLUE FURROW W=12MML=18.3M SS WHITE @ROLL | |
| | XY1P202K000-1 | GLUE,TAPE,#9070,W=12MM,L=50,DOUBLE-SIDE,WHITE. @METER | |
| | XY30155G00-0 | WIRE, TIN, D=1.2MM N.W=2.0KG @KG | |
| | XY4N836M5CL-9 | TCE,CLEANER,-301#,V=55GALLON,TYPELESS @GALLON | |
| | XY6R301K000-0 | GLUE TRANSPARENT W=48MM L=36.5M @ROLL | |
| | XYALC01G000-2 | BAR,TIN,63/37,N.W=1.0KG @KG | |
| | XYGLU00K5RD-7 | ALCOHOL V=1.0GALLON @GALLON | |
| | XYRF801G000-7 | GLUE, RED, W=0.5KG TYPELESS FOR SMT @KG | |
| | XYWAX10K000-6 | FLUX #RF-800 V=1.0 GALLON @ GALLON | |
| | | ANTI-OXIDATION,WAX,W-1#,N.W=10KG,@KG | |
| | 3SA-3071US-FCAA-1-8 | AC ESABD IAA FRONT BD AVR430 | |
| D101 | H01-DG1N04148NB-4 | D-SLP 1N4148 100.0V 150E-3A | |
| J139 | H01-LAINB0470CR-2 | LF 47U0H +10% 5.8 OHM 500MI0A | |
| L100 | H01-LAINB047ACR-3 | LF 4U7H +10% 1.7 OHM 190.0A | |
| R165 166 167 | RC3DI0103IN-7 | RCF 10K0 OHM +5% 250MI0W | |
| R802 | RC3DI0221IN-1 | RCF 220R0 OHM +5% 250MI0W | |
| R803 | RC3DI0271IN-8 | RCF 270R0 OHM +5% 250MI0W | |
| R700 701 702 703 | RC3DI0331IN-5 | RCF 330R0 OHM +5% 250MI0W | |
| | 3SA-3071US-FCAR-1-A | AC ESABD IAR FRONT BD AVR430 | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|---|-------------------|---|------|
| C123 | CCZID0104NA-2 | CC 100N0F +80% -20% 50.0V F | |
| C601 | CEHEC0107NN-9 | CE 100U0F +20% 10.0V 5X11 85C | |
| C103 | CEHFC0476DH-4 | CE 47U0F +20% 16.0V 85C | |
| C129 130 | CPIKC0473NN-0 | CPF 47N0F +10% 100.0V | |
| S200 201 202 203 204 205 206 207 208 209 211 212 213 214 215 216 217 218 219 220 | H01-SWC2A112FS1-8 | SWITACT VERTICAL SKQNADD010 12V 50MA | |
| Q100 101 | H01-TRMPSA56YNA-5 | TR-SLPLF MPSA56 Y P -500MI0A -300V | |
| 3SA-3071US-FCST-1-6 | | AC ESABD SMD FRONT BD AVR430 | |
| C111 112 113 115 116 118 119 120 121 | CZJII0101BE-2 | CCCFMIC 100P0F +5% -5% 50.0V NP0 0603 | |
| C220 221 | CZKII0223BC-6 | CCCFMIC 22N0F +10% -10% 50.0V X7R 0603 | |
| C100 101 | CZKII0821BC-8 | CCCFMIC 820P0F +10% -10% 50.0V X7R | |
| C102 110 122 132 200 201 | CZZFI0104BF-8 | CCCFMIC 100N0F +80% -20% 16.0V Y5V | |
| D100 102 103 104 105 200 201 202 203 | H01-DS1S50094NB-A | D-SLP 1SS355 35.0V 225MI0A | |
| IC101 | H01-ICBU4094BD3-2 | IC CMOS BU4094BF SOP16 | |
| J156 157 301 302 303 R901 902 903 | RS3AD0000NA-0 | RMGCFMIC 0 OHM +0% 62MI5W | |
| R103 | RS3AD0100NA-7 | RMGCFMIC 10R0 OHM +5% 62MI5W | |
| R161 | RS3AD0101NA-5 | RMGCFMIC 100R0 OHM +5% 62MI5W | |
| R1 110 119 120 121 136 160 162 163 164 201 211 | RS3AD0102NA-3 | RMGCFMIC 1K0 OHM +5% 62MI5W | |
| R2 | RS3AD0104NA-A | RMGCFMIC 100K0 OHM +5% 62MI5W | |
| R202 212 | RS3AD0122NA-8 | RMGCFMIC 1K2 OHM +5% 62MI5W | |
| R203 213 | RS3AD0152NA-A | RMGCFMIC 1K5 OHM +5% 62MI5W | |
| R209 219 | RS3AD0183NA-A | RMGCFMIC 18K0 OHM +5% 62MI5W | |
| R109 134 | RS3AD0221NA-6 | RMGCFMIC 220R0 OHM +5% 62MI5W | |
| R204 214 | RS3AD0222NA-4 | RMGCFMIC 2K2 OHM +5% 62MI5W | |
| R205 215 | RS3AD0272NA-0 | RMGCFMIC 2K7 OHM +5% 62MI5W | |
| R206 216 | RS3AD0332NA-8 | RMGCFMIC 3K3 OHM +5% 62MI5W | |
| R122 | RS3AD0471NA-5 | RMGCFMIC 470R0 OHM +5% 62MI5W | |
| R102 | RS3AD0472NA-3 | RMGCFMIC 4K7 OHM +5% 62MI5W | |
| R104 | RS3AD0473NA-1 | RMGCFMIC 47K0 OHM +5% 62MI5W | |
| R207 217 | RS3AD0562NA-2 | RMGCFMIC 5K6 OHM +5% 62MI5W | |
| R800 801 | RS3AD0681NA-5 | RMGCFMIC 680R0 OHM +5% 62MI5W | |
| R100 101 | RS3AD0683NA-1 | RMGCFMIC 68K0 OHM +5% 62MI5W | |
| R208 218 | RS3AD0822NA-2 | RMGCFMIC 8K2 OHM +5% 62MI5W | |
| Q102 103 805 | H01-TRDTC114YN1-5 | TR-SSD DTC114YKA N 10K0 OHM 47K0 OHM | |
| Q800 | H01-TRKTD1304ND-5 | TR-SLPSWA KTD1304 N 20V 300MI0A SOT-23 | |
| 043 | XYGLU00K5RD-7 | GLUE, RED, W=0.5KG TYPELESS FOR SMT @KG | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|-------------------------------------|----------------------------|---|------|
| | 3SA-3071US-MAMI-1-2 | AC EMBD IMA MAIN BD AVR430 | |
| C515 | PBC11KMA120-3 | AVR630 MAIN SINGLE PCB 330MM*245MM FR-1 | |
| C514 | CEHFA0228MN-3 | CE 2M12F +20% 16.0V 85C | |
| C509 510 | H01-CEHFA0688MN-5 | CE 6M18F +20% 16.0V 85C 16X31.5 SHL | |
| C517 | CEHHC0228MN-A | CE 2M12F +20% 35.0V 85C | |
| C504 505 | CEHIA0228MN-4 | CE 2M12F +20% 50.0V 85C | |
| C303 304 305 306 421 422 423 424 | H01-CEHJA0129NN-2 | CAP ELEC DL 12000uF 63.0V 85C | |
| D501 | CEHJA0477MN-9 | CE 470U0F +20% 63.0V 85C | |
| D503 | H01-DRBU10040BA-6 | D-BRDLC BRIDGE BU10-04 | |
| D502 505 | H01-DRBU604F0NA-9 | DIODE BRIDGE BU6-04F FRONTIER | |
| IC53 | H01-DRW204F00BA-A | DIODE BRIDGE W2-04F FRONTIER | |
| IC55 | H01-ICBA033T0I2-9 | IC-REGPOSFXD BA033T NORMAL | |
| IC59 | H01-ICKIA7805I2-7 | IC-REGPOSFXD KIA7805API NORMAL TO-220IS | |
| IC54 | H01-ICKIA7812I2-2 | IC-REGPOSFXD KIA7812API NORMAL | |
| IC56 | H01-ICKIA7824I2-7 | IC-REGPOSFXD KIA7824API TO-220IS NORMAL | |
| IC22 | H01-ICKIA7905I2-5 | IC-REGNEGFXD KIA7905PI NORMAL | |
| IC51 | H01-ICL02068D2-A | IC-OPERAMP NJM2068M DUAL SOP8 | |
| IC52 | H01-ICL07815BD-0 | IC-REGPOSFXD KIA7815API NORMAL | |
| L301 302 401 402 | H01-ICL07915BD-9 | IC-REGNEGFXD KIA7915API NORMAL TO-220AB | |
| R378 379 471 472 | H01-LCNNNA050NA-1 | LFA 1MM 10MM 5 LEFT 0.0MM NONE | |
| R392 393 475 476 | H01-RI3IC022BEN-8 | RW 220M10 OHM +5% 5.0W 100PPM/'C -100PPM/'C | |
| R505 | RM3FC0100BN-7 | RMOF 10R0 OHM +5% 1.0W | |
| R514 | RM3GC0100CN-A | RMOF 10R0 OHM +5% 2.0W | |
| R504 506 507 508 510 515 | RM3GC022ACN-A | RMOF 2R2 OHM +5% 2.0W | |
| R509 | RM3GC033ACN-3 | RMOF 3R3 OHM +5% 2.0W | |
| PO72 | RM3GC047ACN-9 | RMOF 4R7 OHM +5% 2.0W | |
| PO71 | H01-RP3NA0101NN-A | POS 100R0 OHM 16.0V | |
| VR71 72 73 74 | H01-RP3NA0101NZ-3 | POS 100R0 OHM 16.0V RED | |
| NJ13 | RT6BA0201NB-A | PR 200R0 OHM +30% 100MIOW | |
| NJ14 | SO0A18P8CNN-7 | JACK-TELE SNAP-IN GOLDEN TELECOM GDL1-8P8C 8T BK 0 0 | |
| NJ12 | H01-SOPA81900NN-8 | CONN-SPE TERMINAL SPKR 8P SH081136JP FE 19MM 8 -- 0 0 | |
| NJ11 | H01-SORA40RSANN-6 | JACK RCA 4P JB040131ZN GN BN PP TA | |
| Q329 330 433 434 | H01-SORA40RSCNN-A | JACK RCA 4P JB040131QN WH BU RD GY | |
| Q335 336 439 440 | H01-TR2SA1859BC-2 | TR-SHPLF 2SA1859A P -2.0A | |
| Q701 702 703 704 | H01-TR2SA1986BE-5 | TR-SHPLF 2SA1986-R P -15.0A | |
| Q331 332 435 436 | H01-TR2SC4137BE-0 | TR-SHPLF 2SC4137 N 100MI0A 20V | |
| Q333 334 437 438 | H01-TR2SC4883BC-8 | TR-SHPLF 2SC4883A N 2.0A | |
| REWORK DSPBD W601 | H01-TR2SC5358BO-6 | TR-SHPLF 2SC5358-R N 15.0A | |
| W401 | H01-WC1164605C1-7 | WCL 460-05-05 UL1007 HOOK-UP 16 460MM BK 05 05 | |
| W301 | H01-WC1180905C1-1 | WCL 090-05-05 UL1007 HOOK-UP 18 90MM BK 05 05 | |
| N801 802 803 804 | H01-WC1221905C1-9 | WCL 190-05-05 UL1007 HOOK-UP 22 190MM BK 05 05 | |
| N807 809 | H01-WG02SB80800-0 | WIRECONASY UNIQUE 2 80MM UL1007 PVC DISCRETE 26 | |
| N808 | H01-WG03SB82100-7 | WIRECONASY DL 2.0MM 3P 210MM UL1007 RIBBON 26 12 | |
| P812 813 815 816 | H01-WG03SB84400-4 | WIRECONASY DL 2.0MM UNIQUE 3P 440MM UL1007 PVC DISCRETE 26 1 | |
| P801 802 803 804 810 | H01-WN02SB00000-9 | CONN 2.0MM 2 MA ST NAT GT201-2P-TS | |
| P805 814 | H01-WN02SD00000-7 | CONN 2.5MM 2 MA ST NAT 0 0 | |
| P807 | H01-WN03SB00000-6 | CONN 2.0MM 3 MA ST NAT GT201-3P-TS | |
| P806 | H01-WN03SE00000-3 | CONN 3.96MM PITCH MOLEX 35313-0310 | |
| P808 | H01-WN04SB00000-3 | CONN 2.0MM 4 MA ST NAT GT201-4P-TS | |
| P811 | H01-WN08SD00000-0 | CONN 2.5MM 8 MA ST NAT 0 0 | |
| N805 | H01-WN19SB00000-6 | CONN 2.0MM 19 MA ST NAT MOLEX 35336-1910 0 0 | |
| N806 | H01-WS8263605EN-8 | WIRECONASY DL 2.0MM 8P 360MM UL1533 SHIELD 26 1 | |
| | H01-WSE263905EN-5 | WIRECONASY DL 2.0MM 15P 390MM UL1533 SHIELD 26 1 | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|--|-------------------|---|------|
| | XY0N211N5WH-4 | CABLE TIE W=0.2MM L=11.5CM WHITE @ STRIP | |
| | XY0P523K000-A | WIRE,IRON,D=0.5MM,N.W=23KG @KG | |
| | XY0P801K000-A | WIRE TIN D=0.8MM N.W=1.0KG @KG | |
| | XY1N127N0WH-5 | ADHESIVE WHITE D=1.1CM L=27CM @KG | |
| | XY1N218M3SW-4 | GLUE FURROW W=12MML=18.3M SS WHITE @ROLL | |
| | XY1P202K000-1 | WIRE, TIN, D=1.2MM N.W=2.0KG @KG | |
| | XY5020000AA-0 | ADHESIVE SUP-GLUE "AA" #502 TRANS @BOTTLE | |
| | XY57501K0YW-0 | GLUE, YELLOW, N.W=1.0KG #575 @KG | |
| | XY6R301K000-0 | BAR,TIN,63/37,N.W=1.0KG @KG | |
| | XY74601K0WH-9 | OINTMENT HTC #SDL-746 NW=1.0KG WHITE @KG | |
| | XYALC01G000-2 | ALCOHOL V=1.0GALLON @GALLON | |
| | XYRF801G000-7 | FLUX #RF-800 V=1.0 GALLON @ GALLON | |
| | XYWAX10K000-6 | ANTI-OXIDATION,WAX,W-1#,N.W=10KG,@KG | |
| | XYWD405G000-0 | CLEANER,#WD-40,V=5.0 GALLONS @GALLONS | |
| HK12 | H01-ZMC12HS0200-5 | AC HEATSINK DIODE 39X26X12 AVR630 -- ME | |
| HK11 | H01-ZMC12HS0300-7 | H/SINK REG 118*20* | |
| 070 | ZSTBM3010BB-5 | SCREW ST BH 3X10 | |
| 080 | ZSTBM3012BY-A | SCREW ST BH 3X12 PIVOT | |
| 060 | ZSTWM3008BY-8 | SCREW ST WPH 3X8 | |
| 090 | ZWM803305PZ-1 | WASHER PLAIN 3 | |
| 3SA-3071US-MAAA-1-0 | | AC ESABD IAA MAIN BD AXIAL AVR430 | |
| C101 102 103 104 107 108 109 110 111 112 113 114 115 116 117 118 209 | CCKID0101NA-7 | CC 100P0F +10% -10% 50.0V Y5P | |
| C307 308 313 314 403 404 569 570 | CCKID0271NN-0 | CC 270P0F +10% -10% 50.0V 2B4 | |
| C433 601 602 | CCMFD0103NN-4 | CC 10N0F +20% -20% 16.0V Y5S | |
| C333 434 | CCMFD0472NN-6 | CC 4N7F +20% -20% 16.0V Y5R | |
| C119 120 212 214 527 | CCZID0104NA-2 | CC 100N0F +80% -20% 50.0V F | |
| D205 206 301 302 303 304 305 306 307 308 401 402 403 404 405 406 407 408 409 410 411 412 | H01-DG1N04148NB-4 | D-SLP 1N4148 100.0V 150E-3A | |
| D207 | H01-DZ1N05231NB-1 | D-ZENER 1N5231B 5.1V 500MI0W | |
| D204 | H01-DZMTZ12V0NB-0 | D-ZENER MTZJ 12.0V 500MI0W | |
| R303 304 477 478 | RC3DI0100IN-2 | RCF 10R0 OHM +5% 250MI0W | |
| R101 102 105 106 109 110 113 114 213 215 221 353 354 369 370 457 458 459 460 609 614 | RC3DI0101IN-0 | RCF 100R0 OHM +5% 250MI0W | |
| R211 603 | RC3DI0102IN-9 | RCF 1K0 OHM +5% 250MI0W | |
| R485 516 605 606 608 610 611 613 | RC3DI0103IN-7 | RCF 10K0 OHM +5% 250MI0W | |
| R207 214 216 217 218 219 220 309 310 479 480 503 604 | RC3DI0104IN-5 | RCF 100K0 OHM +5% 250MI0W | |
| R701 707 710 711 | RC3DI0122IN-3 | RCF 1K2 OHM +5% 250MI0W | |
| R607 612 | RC3DI0123IN-1 | RCF 12K0 OHM +5% 250MI0W | |
| R363 364 365 366 461 462 463 464 | RC3DI0150IN-9 | RCF 15R0 OHM +5% 250MI0W | |
| R380 381 386 387 481 483 488 490 | RC3DI0152IN-5 | RCF 1K5 OHM +5% 250MI0W | |
| R341 342 343 344 384 385 437 438 439 440 482 489 | RC3DI0153IN-3 | RCF 15K0 OHM +5% 250MI0W | |
| R311 312 313 314 405 406 407 408 | RC3DI0162IN-2 | RCF 1K6 OHM +5% 250MI0W | |
| R339 340 345 346 347 348 349 350 433 434 435 436 441 442 443 444 | RC3DI0201IN-7 | RCF 200R0 OHM +5% 250MI0W | |
| R317 318 319 320 321 322 409 410 411 412 413 414 | RC3DI0221IN-1 | RCF 220R0 OHM +5% 250MI0W | |
| R390 391 486 492 | RC3DI0223IN-8 | RCF 22K0 OHM +5% 250MI0W | |
| R371 372 373 374 465 466 467 468 615 | RC3DI022AIN-2 | RCF 2R2 OHM +5% 250MI0W | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|--|-------------------|--|------|
| R497 702 705 708 709 | RC3DI0271IN-8 | RCF 270R0 OHM +5% 250MIOW | |
| R209 498 | RC3DI0273IN-4 | RCF 27K0 OHM +5% 250MIOW | |
| R224 | RC3DI0274IN-2 | RCF 270K0 OHM +5% 250MIOW | |
| R301 302 401 402 | RC3DI0331IN-5 | RCF 330R0 OHM +5% 250MIOW | |
| R225 305 306 403 404 | RC3DI0333IN-1 | RCF 33K0 OHM +5% 250MIOW | |
| R382 383 484 487 491 501 502 | RC3DI0393IN-5 | RCF 39K0 OHM +5% 250MIOW | |
| R307 308 415 416 | RC3DI0433IN-8 | RCF 43K0 OHM +5% 250MIOW | |
| R315 316 593 594 | RC3DI0471IN-0 | RCF 470R0 OHM +5% 250MIOW | |
| R223 | RC3DI0513IN-A | RCF 51K0 OHM +5% 250MIOW | |
| R323 324 325 326 329 330 333 334 335 336 337 338 421 422 423 424 425 426 427 428 429 430 431 432 | RC3DI0561IN-A | RCF 560R0 OHM +5% 250MIOW | |
| R375 376 469 470 | RC3DI0820IN-1 | RCF 82R0 OHM +5% 250MIOW | |
| R493 | RC3DI0822IN-8 | RCF 8K2 OHM +5% 250MIOW | |
| R388 389 473 474 | RC3EG0100LN-4 | RCF 10R0 OHM +5% 500MIOW | |
| R331 332 419 420 | RM1DI0162IN-5 | RMF 1K6 OHM +1% 250MIOW | |
| R327 328 417 418 | RM1DI0333IN-4 | RMF 33K0 OHM +1% 250MIOW | |
| R351 352 367 368 445 446 447 448 | H01-RM3EG0100LN-A | RMF 10R0 OHM +5% 500MIOW | |
| 3SA-3071US-MAAR-1-2 AC ESABD IAR MAIN BD RADIAL AVR430 | | | |
| C315 316 409 410 | CCDIC0030NE-3 | CC 3P0F +0P25F -0P25F 50.0V NPO | |
| C317 318 411 412 | CCKIC0181NA-0 | CC 180P0F +10% -10% 50.0V Y5P | |
| C329 330 425 426 | CCKIC0222NA-1 | CC 2N2F +10% -10% 50.0V Y5P | |
| C331 332 407 408 | CEHEC0227NN-A | CE 220U0F +20% 10.0V 85C | |
| C432 | CEHEC0477MN-A | CE 470U0F +20% 10.0V 6.3X11 85C | |
| C206 208 213 309 310 405 406 526 | CEHGC0107NN-6 | CE 100U0F +20% 25.0V 6.3X1185C | |
| C210 | CEHIC0105NN-7 | CE 1U0F +20% 50.0V 5X11 85C | |
| C211 301 302 319 320 321 322 401 402 413 414 415 416 429 518 519 520 521 522 523 | CEHIC0106NN-5 | CE 10U0F +20% 50.0V 85C | |
| C207 | CEHIC0475NN-7 | CE 4U7F +20% 50.0V 85C | |
| C325 326 327 328 417 418 419 420 | CFIJC0104NN-7 | CPM 100N0F +10% 63.0V | |
| C501 502 503 | CFIOC0104NN-5 | CPM 100N0F +10% 250.0V | |
| C323 324 430 431 | CFLJC0683NN-7 | CPM 68N0F +5% 63.0V | |
| C506 507 508 511 512 513 516 528 529 | CPIKC0473NN-0 | CPF 47N0F +10% 100.0V | |
| F501 502 503 504 505 506 | H01-FURN2200006-6 | FUSE T 2A 250V 7.6X8.6 SS-5 SAVE FUSETECH | |
| Q309 310 411 412 | H01-TR2SA1145NA-2 | TR-SLPLF 2SA1145Y TO-92MOD P -50MI0A -150V | |
| Q443 | H01-TRKRC107MNA-9 | TR-SLPSWA KRC107M N | |
| Q315 316 319 320 327 328 417 418 421 422 431 432 442 | H01-TRKTA1024NA-7 | TR-SLPLF KTA1024 Y P 50MI0A -150V | |
| Q605 607 | H01-TRKTA1266NA-0 | TR-SLPLF KTA1266 Y P 150MI0A | |
| Q311 312 410 413 414 | H01-TRKTA1268NA-4 | TR-SHPLF KTA1268BL P 100MI0A 120V | |
| Q307 308 407 408 426 441 606 608 | H01-TRKTC3198NA-3 | TR-SLPLF KTC3198BL N 150MI0A | |
| Q301 302 303 304 305 306 313 314 337 338 401 402 403 404 405 406 409 415 416 425 | H01-TRKTC3200NA-9 | TR-SHPLF KTC3200BL N 100MI0A 120V | |
| Q317 318 321 322 323 324 419 420 423 424 429 430 | H01-TRKTC3206NA-A | TR-SLPLF KTC3206 Y N 50MI0A 150V | |
| Q602 | H01-TRKTD1302NA-0 | TR-SLPLF KTD1302 B N 300MI0A 20V | |
| G101 102 | H01-ZNMSA4004SN-4 | TERMLUG GND | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|---------|----------------------------|--|------|
| | 3SA-3071US-PA00-1-5 | AC BOM PKG AVR430 | |
| | H01-ATALF039ABK-A | ANTENNA WIRE ANTENNA LOOP CT01-AM 0 0 | |
| | BTA3A1511SF-0 | BATTERY ALKALINE 1.5V AAA | |
| | H01-RYC1001HA00-0 | REMOCON AVR430 | BK |
| | H01-RYD0101HA00-8 | REMOCON AVR430 EU | IB |
| | H01-RYC1202HA00-5 | REMOCON ZONE 2 | |
| | H01-WAB01200203-9 | ANTENNA WIRE 75 CT02-FM 0 0 | BK |
| | H01-WAD01200303-3 | ANTENNA WIRE 75 OHM WIRE CT03-FM 00 | IB |
| | H01-WAUSA2103BK-1 | POWER CORD WS-004C+002E SJT#14*2C L=2M | BK |
| | H01-WAD022000BK-2 | WR002 H05VVF 0.75MMSQ 2G BLACK 2000MM | IB |
| | XY0M51K5M00-3 | MEMBRANE POLY TRANS W=0.5M L=1.5KM @ROLL | |
| | XY1N218M3CL-9 | GLUE TRANSPARENT W=12MM L=18.3M @ROLL | |
| | XY7N636M5CL-8 | Glue, Transparent,W=76mm, L=36.5m @m | |
| | XYGLAA5K200-3 | GLASS CLEANER,N.W=0.52KG @BOTTLE | |
| | XYJBLA4L800-5 | WAX JUBILEE, CLEANER V=0.48LITER @BOTTLE | |
| | ZBP00020350-4 | POLYBAG BATTERY | |
| | ZBP00122051-8 | BAG PE 330 X245 T0.05 | |
| | ZHC1201AAWH-A | FILM SHEET PE 920 X 1000 | |
| | ZKC1001HB00-4 | MANUAL AVR430 | BK |
| | ZKD0101HA00-A | MANUAL AVR430 EU | IB |
| | ZKC1004HA00-5 | BOX CARTON AVR430 | BK |
| | ZKD0104HA00-9 | BOX CARTON AVR430 EU | IB |
| | ZKC1016HA00-3 | QUICK SETUP GUIDE AVR430 | |
| | ZKC1073HA00-7 | LABEL BARCODE AVR430 | BK |
| | ZKD0173HA00-0 | LABEL BARCODE AVR430 EU | IB |
| | ZKC1113HA00-9 | CARD WARRANTY | |
| | ZKC11H96A00-1 | POLISHING CLOTH | |
| | ZKC1214HA00-A | LABEL SAFETY LEAFLET | BK |
| | ZKD0114HA00-4 | SAFETY MANUAL EU | IB |
| | ZKC1263HA00-0 | INSERT RS232 NOTE PAPER | |
| | ZKC1270HA00-7 | LABEL "PLEASE" | |
| | ZKGEN43HA00-0 | CARD INSERT ENVELOPE | |
| | ZKGEN56HA00-5 | ENVELOPE POLISHING CLOTH | |
| | ZKGEN73HA00-7 | LABEL BARCODE BLANK | |
| | ZQC1101HAWH-2 | CUSHION POLY EPS RIGHT AVR430/630 | |
| | ZQC1102HAWH-9 | CUSHION POLY EPS LEFT AVR430/630 | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|---|------------------------------------|---|------|
| | 3SA-3071US-POMI-1-0 | AC EMBD IMA PRO BD AVR430 | |
| | PBC11KPOB20-7 | AVR630 PROCESSOR DUAL PCB 209MM*170MM FR-4 | |
| C20 | CEHFC0106NN-4 | CE 10U0F +20% 16.0V 85C 5X11 | |
| SK1 | H01-RLL1296122A-5 | RELAYSGNL 12.0V 960.0OHM 3.0A | |
| NJ51 52 53 54 55 | H01-SORA40GNDNN-7 | JACK RCA 4P JB040131PN WWRR | |
| P20 20-1 | H01-WC2260755CG-7 | WIRECONASY DL 2.0MM 02P 75MM ANG UL1007 RIBBON 26 1 B2011H02 | |
| P13 | H01-WN03SB00000-6 | CONN 2.0MM 3 MA ST NAT GT201-3P-TS | |
| P1 3 12 | H01-WN04SB00000-3 | CONN 2.0MM 4 MA ST NAT GT201-4P-TS | |
| P4 | H01-WN06SB00000-8 | CONN 2.0MM 6 MA ST NAT GT201-6P-TS | |
| P10 | H01-WN08SB00000-2 | CONN 2.0MM 8 MA ST NAT GT201-8P-TS | |
| P2 | H01-WN11AB00000-0 | CONN 2.0MM 11 MA R NAT SOCKET MOLEX 35237-1110 0 0 | |
| P9 | H01-WN15SB00000-7 | CONN 2.0MM 15 MA ST NAT GT201-15P-TS | |
| P6 | H01-WN17AB00000-4 | CONN 2.0MM 17 MA R NAT SOCKET MOLEX 35237-1710 0 0 | |
| N2 P7 | H01-WN19AB00000-9 | CONN 2.0MM 19 MA R NAT SOCKET MOLEX 35237-1910 0 0 | |
| | XY0N618M3SW-A | GLUE FURROW W=6MM L=18.3M SS WHITE @ROLL | |
| | XY0P801K000-A | WIRE TIN D=0.8MM N.W=1.0KG @KG | |
| | XY1N209M0DW-4 | GLUE TAPE W=12MM L=9.0M DS WHITE @ROLL | |
| | XY1N218M3SW-4 | GLUE FURROW W=12MML=18.3M SS WHITE @ROLL | |
| | XY1P202K000-1 | WIRE, TIN, D=1.2MM N.W=2.0KG @KG | |
| | XY30155G00-0 | TCE,CLEANER,-301#,V=55GALLON,TYPELESS @GALLON | |
| | XY4N836M5CL-9 | GLUE TRANSPARENT W=48MM L=36.5M @ROLL | |
| | XY6R301K000-0 | BAR,TIN,63/37,N.W=1.0KG @KG | |
| | XYALC01G000-2 | ALCOHOL V=1.0GALLON @GALLON | |
| | XYGLU00K5RD-7 | GLUE, RED, W=0.5KG TYPELESS FOR SMT @KG | |
| | XYJUI00K5GY-5 | JUICE TIN N=0.5KG GREY @KG | |
| | XYRF801G000-7 | FLUX #RF-800 V=1.0 GALLON @ GALLON | |
| | XYWAX10K000-6 | ANTI-OXIDATION,WAX,W-1#,N.W=10KG,@KG | |
| | 3SA-3071US-POAR-1-0 | AC ESABD IAR PRO BD RADIAL AVR430 | |
| C79 80 82 83 113 114 116 118 139140 142 144 C6 7 13 14 16 17 19 37 38 40 41 56 57 59 60 84 85 87 88 90 91 106 107 121 123 124 125 126 131 147 149 151 152 159 160 162 164 169 170 172 174 190 195 196 197 198 205 206 207 | H01-CEHFC0106AH-5 CEHFC0106NN-4 | CE 10U0F +20% 16.0V 85C AH SAMYOUNG CE 10U0F +20% 16.0V 85C 5X11 | |
| C5 8 15 18 39 42 55 58 78 81 86 89 92 95 96 97 98 99 100 101 102 103 104 105 108 109 112 119 120 122 127 129 132 133 138 145 146 153 158 165 168 175 189 201 202 208 209 210 224 225 | CEHFC0476NN-4 | CE 47U0F +20% 16.0V 85C | |
| C176 177 | CEHGC0337NN-0 | CE 330UI0F +20% 25V 85C | |
| C221 222 | CEHIC0475NN-7 | CE 4U7F +20% 50.0V 85C | |
| GND1 | H01-ZNMSA4004SN-4 | TERMLUG GND | |
| | 3SA-3071US-POSB-1-1 | AC ESABD SMD BOT PRO BD AVR430 | |
| C1 2 3 4 9 10 11 12 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 43 44 45 46 47 48 49 50 61 62 63 64 65 67 69 70 71 72 73 110 117 128 135 136 143 155 156 163 166 173 178 179 180 181 182 183 184 191 192 193 194 228 229 | CZJII0101BE-2 | CCCFMIC 100P0F +5% -5% 50.0V NP0 0603 | |
| C215 216 | CZJII0103CC-1 | CCCFMIN 10N0F +-5% 50.0V X7R 0805 | |
| C188 203 204 226 227 | CZJII0330BE-9 | CCCFMIC 33P0F +5% -5% 50.0V NPO | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|---|-------------------|---|------|
| C130 134 | CZJII0331BE-7 | CCCFMIC 330P0F +5% -5% 50.0V NPO | |
| C94 148 | CZKII0222BC-8 | CCCFMIC 2N2F +10% -10% 50.0V X7R | |
| C51 52 185 186 187 211 | CZZFI0104BF-8 | CCCFMIC 100N0F +80% -20% 16.0V Y5V | |
| D2 | H01-DS0KDS160NB-4 | D-SLP KDS160 85.0V 100M10A | |
| IC29 30 | H01-ICLM02068D2-A | IC-OPERAMP NJM2068M DUAL SOP8 | |
| IC10 | H01-ICTC9273NDA-0 | IC-SWITCH TC9273F-004 SOP28 ANALOG SWITCH | |
| J7 8 9 10 11 12 26 38 39 40 41 R317 318 | RS3AD0000NA-0 | RMGCFMIC 0 OHM +0% 62M15W | |
| R1 10 11 13 18 30 31 44 63 64 77 79 82 88 89 98 107 112 121 126 131 133 136 137 141 142 166 167 171 172 174 184 185 189 195 197 198 201 204 231 238 260 273 288 | RS3AD0101NA-5 | RMGCFMIC 100R0 OHM +5% 62M15W | |
| R3 4 27 29 32 34 46 48 49 51 57 59 61 71 91 92 93 94 95 96 138 139 140 143 144 145 150 151 152 153 154 155 168 169 170 221 229 247 254 256 264 269 277 279 286 293 301 303 310 324 325 326 329 334 343 344 345 346 347 348 349 350 | RS3AD0102NA-3 | RMGCFMIC 1K0 OHM +5% 62M15W | |
| R2 5 12 14 15 16 17 21 26 28 33 35 40 41 42 43 45 47 50 52 58 60 65 66 67 68 85 86 109 110 113 114 119 120 123 124 129 130 146 147 161 162 175 176 181 183 186 188 191 192 193 194 196 199 203 214 217 218 225 233 234 236 239 241 244 245 246 251 252 281 282 287 289 297 305 306 308 311 313 341 | RS3AD0104NA-A | RMGCFMIC 100K0 OHM +5% 62M15W | |
| R134 163 164 165 | RS3AD0123NA-6 | RMGCFMIC 12K0 OHM +5% 62M15W | |
| R235 237 | RS3AD0152NA-A | RMGCFMIC 1K5 OHM +5% 62M15W | |
| R132 255 263 270 278 294 302 | RS3AD0202NA-A | RMGCFMIC 2K0 OHM +5% 62M15W | |
| R208 209 212 216 | RS3AD0221NA-6 | RMGCFMIC 220R0 OHM +5% 62M15W | |
| R210 213 220 226 259 268 274 292 298 315 327 336 337 | RS3AD0222NA-4 | RMGCFMIC 2K2 OHM +5% 62M15W | |
| R200 202 | RS3AD0242NA-9 | RMGCFMIC 2K4 OHM +5% 62M15W | |
| R205 249 | RS3AD0272NA-0 | RMGCFMIC 2K7 OHM +5% 62M15W | |
| R20 56 62 74 115 116 117 118 | RS3AD0333NA-6 | RMGCFMIC 33K0 OHM +5% 62M15W | |
| R222 230 | RS3AD0362NA-A | RMGCFMIC 3K6 OHM +5% 62M15W | |
| R177 179 | RS3AD0432NA-4 | RMGCFMIC 4K3 OHM +5% 62M15W | |
| R6 9 22 25 36 39 73 76 127 148 149 178 182 187 206 211 284 335 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 | RS3AD0471NA-5 | RMGCFMIC 470R0 OHM +5% 62M15W | |
| R128 | RS3AD0472NA-3 | RMGCFMIC 4K7 OHM +5% 62M15W | |
| R69 70 102 105 240 250 283 285 307 309 312 | RS3AD0512NA-6 | RMGCFMIC 5K1 OHM +5% 62M15W | |
| R108 111 173 180 | RS3AD0821NA-4 | RMGCFMIC 820R0 OHM +5% 62M15W | |
| R207 215 | RS3AD0911NA-3 | RMGCFMIC 910 OHM +5% 62M15W | |
| R248 | RS3AD0912NA-1 | RMGCFMIC 9K1 OHM +5% 62M15W | |
| Q20 | H01-TRDTA114YNI-9 | TR-SSD DTA114YKA P 10K0 OHM 47K0 OHM | |
| Q54 | H01-TRDTC114YNI-5 | TR-SSD DTC114YKA N 10K0 OHM 47K0 OHM | |
| Q1 2 19 24 26 27 28 29 30 31 33 36 38 39 40 42 44 45 46 | H01-TRKTD1304ND-5 | TR-SLPSWA KTD1304 N 20V 300M10A SOT-23 | |

3SA-3071US-POST-1-7 AC ESABD SMD TOP PRO BD AVR430

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|--|-------------------|---|------|
| C223 | CZJII0101BE-2 | CCCFMIC 100P0F +5% -5% 50.0V NPO 0603 | |
| C217 218 | CZJII0103CC-1 | CCCFMIN 10N0F +-5% 50.0V X7R 0805 | |
| C219 220 | CZJII0150CE-A | CCCFMIN 15P0F +5% -5% 50.0V NPO 0805 | |
| C66 68 111 115 137 141 154 157 161 167 171 199 200 | CZJII0330BE-9 | CCCFMIC 33P0F +5% -5% 50.0V NPO | |
| C213 214 | CZJII0682CC-3 | CCCFMIN 6N8F +5% -5% 50.0V X7R 0805 | |
| C93 150 | CZKII0222BC-8 | CCCFMIC 2N2F +10% -10% 50.0V X7R | |
| C212 | CZZFI0104BF-8 | CCCFMIC 100N0F +80% -20% 16.0V Y5V | |
| D8 9 12 14 21 | H01-DSUDZ09V1NB-7 | D-ZENER UDZS 9.1B 9.1V 200MI0W | |
| IC5 14 | H01-ICKIC9162DA-5 | IC-SWITCH KIC9162AF SOP28 ANALOG SWITCH | |
| IC3 | H01-ICKIC9163DA-7 | IC-SWITCH KIC9163AF SOP28 ANALOG SWITCH | |
| IC2 18 | H01-ICKIC9459D5-8 | IC-LOWFREQ KIC9459F SOP24 TONE/VOL/BAL/MUTE | |
| IC1 4 7 8 9 12 13 15 16 17 20 21 23 24 25 26 27 | H01-ICLMO2068D2-A | IC-OPERAMP NJM2068M DUAL SOP8 | |
| IC19 | H01-ICLMO9482DA-5 | IC-LOWFREQ KIC9482F SOP28 TONE/VOL/BAL/MUTE | |
| IC22 | H01-ICNJM4556DM-0 | IC-OPERAMP NJM4556AM DUAL OP | |
| IC6 | H01-ICTC9273NDA-0 | IC-SWITCH TC9273F-004 SOP28 ANALOG SWITCH | |
| IC28 | H01-ICTC9481FDA-0 | IC-LOWFREQ TC9481F SOP28 TONE | |
| R75 78 232 242 243 253 280 290 304 314 | RS3AD0101NA-5 | RMGCFMIC 100R0 OHM +5% 62MI5W | |
| R72 80 81 122 125 | RS3AD0102NA-3 | RMGCFMIC 1K0 OHM +5% 62MI5W | |
| R135 158 | RS3AD0123NA-6 | RMGCFMIC 12K0 OHM +5% 62MI5W | |
| R223 262 271 295 | RS3AD0183NA-A | RMGCFMIC 18K0 OHM +5% 62MI5W | |
| R7 8 23 24 37 38 53 54 224 228 257 261 272 276 296 300 316 | RS3AD0222NA-4 | RMGCFMIC 2K2 OHM +5% 62MI5W | |
| R156 157 159 160 | RS3AD0332NA-8 | RMGCFMIC 3K3 OHM +5% 62MI5W | |
| R19 55 83 84 87 90 97 219 265 266 267 291 | RS3AD0333NA-6 | RMGCFMIC 33K0 OHM +5% 62MI5W | |
| R227 258 275 299 | RS3AD0474NA-A | RMGCFMIC 470K0 OHM +5% 62MI5W | |
| Q3 13 14 17 23 25 32 34 35 37 41 43 50 | H01-TRDTA114YNI-9 | TR-SSD DTA114YKA P 10K0 OHM 47K0 OHM | |
| Q4 7 8 9 10 11 12 15 16 58 59 | H01-TRKTD1304ND-5 | TR-SLPSWA KTD1304 N 20V 300MI0A SOT-23 | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|--|----------------------------|---|------|
| | 3SA-3071US-SRMI-1-9 | AC EMBD IMA SURROUND BD AVR430 | |
| C301 302 401 402 501 502 | PBC11KSRI20-5 | AVR630 SURROND SINGLE PCB 330MM*247MM | |
| L301 401 501 | CEHJA0477MN-9 | CE 470U0F +20% 63.0V 85C | |
| R338 438 538 | H01-LCNNNA050NA-1 | LFA 1MM 10MM 5 LEFT 0.0MM NONE | |
| R345 445 545 | H01-RI3IC022BEN-8 | RW 220MIO OHM +5% 5.0W 100PPM/'C -100PPM/'C | |
| PO51 | RM3FC0100BN-7 | RMOF 10R0 OHM +5% 1.0W | |
| PO52 | H01-RP3NA0101NN-A | POS 100R0 OHM 16.0V | |
| VR31 32 51 | H01-RP3NA0101NZ-3 | POS 100R0 OHM 16.0V RED | |
| NJ31 | H01-RT7EA0201NB-6 | PR 200R0 OHM +20% 500MIOW | |
| Q316 416 516 | H01-SOPA619BKNN-7 | CONN-SPE TERMINAL SPKR 6P SH0611708P FE 19MM 6 BK 0 0 | |
| Q319 419 519 | H01-TR2SA1859BC-2 | TR-SHPLF 2SA1859A P -2.0A | |
| Q314 414 514 | H01-TR2SC4137BE-0 | TR-SHPLF 2SA1986-R P -15.0A | |
| Q317 417 517 | H01-TR2SC4883BC-8 | TR-SHPLF 2SC4137 N 100MIOA 20V | |
| Q318 418 518 | H01-TR2SC5358BO-6 | TR-SHPLF 2SC4883A N 2.0A | |
| REWORK | H01-WC1181655C1-0 | TR-SHPLF 2SC5358-R N 15.0A | |
| W401 | H01-WC1220905C1-A | WCL 165-05-05 UL1007 HOOK-UP 18 165MM BK 05 05 | |
| N301 | H01-WG03SB84200-0 | WIRECONASY DL 2.0MM UNIQUE 3P 420MM UL1007 PVC DISCRETE 26 1 | |
| P301 308 309 | H01-WN02AD00000-A | CONN 2.5MM 2 MA R NAT 0 0 | |
| P307 | H01-WN03SB00000-6 | CONN 2.0MM 3 MA ST NAT GT201-3P-TS | |
| P303 | H01-WN03SE00000-3 | CON 3.96MM PITCH MOLEX 35313-0310 | |
| P304 | H01-WN04SE00000-0 | CON 3.96MM PITCH MOLEX 35313-0410 | |
| N306 | H01-WS6262605EN-6 | WIRECONASY DL 2.0MM 6P 260MM UL1533 SHIELD 26 1 | |
| | XY0N211N5WH-4 | CABLE TIE W=0.2MM L=11.5CM WHITE @ STRIP | |
| | XY0P523K000-A | WIRE,IRON,D=0.5MM,N.W=23KG @KG | |
| | XY0P801K000-A | WIRE TIN D=0.8MM N.W=1.0KG @KG | |
| | XY1N218M3SW-4 | GLUE FURROW W=12MML=18.3M SS WHITE @ROLL | |
| | XY1P202K000-1 | WIRE, TIN, D=1.2MM N.W=2.0KG @KG | |
| | XY57501K0YW-0 | GLUE, YELLOW, N.W=1.0KG #575 @KG | |
| | XY6R301K000-0 | BAR,TIN,63/37,N.W=1.0KG @KG | |
| | XY74601K0WH-9 | OINTMENT HTC #SDL-746 NW=1.0KG WHITE @KG | |
| 042 | XYALC01G000-2 | ALCOHOL V=1.0GALLON @GALLON | |
| | XYRF801G000-7 | FLUX #RF-800 V=1.0 GALLON @ GALLON | |
| | XYWAX10K000-6 | ANTI-OXIDATION,WAX,W-1#,N.W=10KG,@KG | |
| | XYWD405G000-0 | CLEANER,#WD-40,V=5.0 GALLONS @GALLONS | |
| | 3SA-3071US-SRAA-1-7 | AC ESABD IAA SURROUND BD AXIAL AVR430 | |
| D301 302 303 304 401 402 403 404 501 502 503 504 601 | H01-DG1N04148NB-4 | D-SLP 1N4148 100.0V 150E-3A | |
| R326 336 426 436 526 536 | RC3DI0101IN-0 | RCF 100R0 OHM +5% 250MIOW | |
| R601 606 | RC3DI0103IN-7 | RCF 10K0 OHM +5% 250MIOW | |
| R346 446 546 605 | RC3DI0104IN-5 | RCF 100K0 OHM +5% 250MIOW | |
| R329 429 529 | RC3DI0122IN-3 | RCF 1K2 OHM +5% 250MIOW | |
| R328 335 428 435 528 535 | RC3DI0150IN-9 | RCF 15R0 OHM +5% 250MIOW | |
| R339 341 439 441 539 541 | RC3DI0152IN-5 | RCF 1K5 OHM +5% 250MIOW | |
| R320 321 340 420 421 440 520 521 540 | RC3DI0153IN-3 | RCF 15K0 OHM +5% 250MIOW | |
| R309 310 409 410 509 510 | RC3DI0162IN-2 | RCF 1K6 OHM +5% 250MIOW | |
| R319 322 323 324 419 422 423 424 519 522 523 524 | RC3DI0201IN-7 | RCF 200R0 OHM +5% 250MIOW | |
| R305 306 307 405 406 407 505 506 507 | RC3DI0221IN-1 | RCF 220R0 OHM +5% 250MIOW | |
| R344 444 544 | RC3DI0223IN-8 | RCF 22K0 OHM +5% 250MIOW | |
| R327 337 427 437 527 537 | RC3DI022AIN-2 | RCF 2R2 OHM +5% 250MIOW | |
| R330 430 530 | RC3DI0271IN-8 | RCF 270R0 OHM +5% 250MIOW | |
| R301 401 501 | RC3DI0331IN-5 | RCF 330R0 OHM +5% 250MIOW | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|---|-------------------|---|------|
| R302 402 502 | RC3DI0333IN-1 | RCF 33K0 OHM +5% 250MIOW | |
| R342 442 542 602 603 604 | RC3DI0393IN-5 | RCF 39K0 OHM +5% 250MIOW | |
| R304 404 504 | RC3DI0433IN-8 | RCF 43K0 OHM +5% 250MIOW | |
| R308 408 508 | RC3DI0471IN-0 | RCF 470R0 OHM +5% 250MIOW | |
| R311 314 315 316 317 318 411 414 415 416 417 418 511 514 515 516 517 518 | RC3DI0561IN-A | RCF 560R0 OHM +5% 250MIOW | |
| R334 434 534 | RC3DI0820IN-1 | RCF 82R0 OHM +5% 250MIOW | |
| R343 443 543 | RC3EG0100LN-4 | RCF 10R0 OHM +5% 500MIOW | |
| R313 413 513 | RM1DI0162IN-5 | RMF 1K6 OHM +1% 250MIOW | |
| R312 412 512 | RM1DI0333IN-4 | RMF 33K0 OHM +1% 250MIOW | |
| R303 325 333 403 425 433 503 525 533 | H01-RM3EG0100LN-A | RMF 10R0 OHM +5% 500MIOW | |
| 3SA-3071US-SRAR-1-9 | | AC ESABD IAR SURROUND BD RADIAL AVR430 | |
| C307 407 507 | CCDIC0030NE-3 | CC 3P0F +0P25F -0P25F 50.0V NPO | |
| C309 409 509 | CCKIC0181NA-0 | CC 180P0F +10% -10% 50.0V Y5P | |
| C304 306 404 406 504 506 | CCKIC0271NA-A | CC 270P0F +10% -10% 50.0V Y5P | |
| C331 431 531 | CCKIC0332NA-5 | CC 3N3F +10% -10% 50.0V Y5P | |
| C320 420 520 | CCKIC0472NA-0 | CC 4N7F +10% -10% 50.0V Y5P | |
| C308 408 508 | CEHEC0227NN-A | CE 220U0F +20% 10.0V 85C | |
| C305 405 505 | CEHGC0107NN-6 | CE 100U0F +20% 25.0V 6.3X1185C | |
| C303 311 312 403 411 412 503 511 512 601 | CEHIC0106NN-5 | CE 10U0F +20% 50.0V 85C | |
| C313 314 413 414 513 514 | CFIJC0104NN-7 | CPM 100N0F +10% 63.0V | |
| C310 410 510 | CFLJC0683NN-7 | CPM 68N0F +5% 63.0V | |
| Q305 405 505 | H01-TR2SA1145NA-2 | TR-SLPLF 2SA1145Y TO-92MOD P -50MI0A -150V | |
| Q308 311 315 408 411 415 508 511 515 | H01-TRKTA1024NA-7 | TR-SLPLF KTA1024 Y P 50MI0A -150V | |
| Q306 406 506 601 | H01-TRKTA1268NA-4 | TR-SHPLF KTA1268BL P 100MI0A 120V | |
| Q304 404 504 | H01-TRKTC3198NA-3 | TR-SLPLF KTC3198BL N 150MI0A | |
| Q301 302 303 307 320 401 402 403 407 420 501 502 503 507 520 | H01-TRKTC3200NA-9 | TR-SHPLF KTC3200BL N 100MI0A 120V | |
| Q309 312 313 409 412 413 509 512 513 | H01-TRKTC3206NA-A | TR-SLPLF KTC3206 Y N 50MI0A 150V | |
| G601 602 603 604 605 | H01-ZNMSA4004SN-4 | TERMLUG GND | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|---|----------------------------|--|------|
| | 3SA-3071US-SUMI-1-4 | AC EMBD IMA SUPP BD AVR430 | |
| | PBC11KSUI20-7 | AVR630 SUPPLY SINGLE PCB 163MM*330MM FR-1 | BK |
| | PBD02KSUI20-0 | AVR630EU SUPPLY SINGLE PCB 163MM*330MM FR-1 | IB |
| C103 | CEHJA0477MN-9 | CE 470U0F +20% 63.0V 85C | |
| C201 202 | H01-CEMJA0828MN-7 | CE 8MI2F +20% 63.0V 85C | |
| D201 | H01-DRBU10040BA-6 | D-BRDLC BRIDGE BU10-04 | |
| F101 | H01-FUGF210A0XX-7 | FUSULSLWBL 10.0 A 250.0 V | BK |
| F101 | H01-FUGF205A000-4 | FUSE 50T 250V 5A 217 SERIES | IB |
| F1 | H01-FUGF23000XX-A | FUSE 239 SERIES 003 250V 3A | BK |
| F1 | H01-FUGF202A0XX-4 | FUSVDETIMELG 2.0A 250.0 V 5X20 | IB |
| IC11 | H01-ICKIA7805I2-7 | IC-REGPOSFXD KIA7805API NORMAL TO-220IS | |
| R101 | H01-RA4EG0335LN-9 | RA 3M3 OHM +10% 500MIOW | BK |
| SK11 | H01-RLL1227111K-1 | RELAYPWR 12.0V 270.0OHM 10.0A | |
| R104 | RM3GC0390CN-8 | RMOF 39R0 OHM +5% 2.0W | |
| NS21 | H01-SOPA21275BK-3 | CONN-SPE AC OUTLET 2P 110V FE 12.75MM 2 BK 0 0 | BK |
| NS21 | H01-SOPA20019BK-A | CONN-SPE AC OUTLET 2P 220V FE 19MM2 BK 0 0 | IB |
| NJ70 | H01-SORA1JE01NN-0 | JACK RCA 1P JE010003MN GND OR | |
| NJ79 | H01-SOTOR179LBA-0 | D-LEM TORX-179L | |
| TP11 | H01-TXPWMS630A0-6 | TF-LAM ST/BY-TRANSFORMER AVR630 120V | BK |
| TP11 | H01-TXPWMSD02A0-1 | TF-LAM ST/BY-TRANSFORMER AVR630EU 230V | IB |
| W700 | H01-WG01S083000-8 | WIRECONASY UNIQUE 1P 300MM UL1007 PVC DISCRETE 22 2 | |
| N209 | H01-WG02SE81500-3 | WIRECONASY DL 3.96MM 2P 150MM UL1007 RIBBOM 16 1 | |
| N202 | H01-WG03SE81700-4 | WIRECONASY DL 3.96MM 3P 170MM UL1007 RIBBON 16 1 | |
| N203 | H01-WG04SE82400-7 | WIRECONASY DL 3.96MM 4P 240MM UL1007 RIBBON 16 1 | |
| P207 208 | H01-WN02SE00000-6 | CON 3.96MM PITCH HEADER 2 POS MOLEX 35328-0210 | |
| P201 | H01-WN04SE00000-0 | CON 3.96MM PITCH MOLEX 35313-0410 | |
| P206 | H01-WN07SD00000-3 | CNT PLUG ST 2.5mm 7P 5267-07A | |
| N700 | H01-WS5267605CN-A | CNT ASSY 2.0MM 5P 760MM SHIELD 26AWG UL1007 | |
| | XY0N211N5WH-4 | CABLE TIE W=0.2MM L=11.5CM WHITE @ STRIP | |
| | XY0N618M3SW-A | GLUE FURROW W=6MM L=18.3M SS WHITE @ROLL | |
| | XY0P523K000-A | WIRE,IRON,D=0.5MM,N.W=23KG @KG | |
| | XY0P801K000-A | WIRE TIN D=0.8MM N.W=1.0KG @KG | |
| | XY1N209M0DW-4 | GLUE TAPE W=12MM L=9.0M DS WHITE @ROLL | |
| | XY1N218M3SW-4 | GLUE FURROW W=12MML=18.3M SS WHITE @ROLL | |
| | XY1P202K000-1 | WIRE, TIN, D=1.2MM N.W=2.0KG @KG | |
| | XY30155G00-0 | TCE,CLEANER,-301#,V=55GALLON,TYPELESS @GALLON | |
| | XY4N836M5CL-9 | GLUE TRANSPARENT W=48MM L=36.5M @ROLL | |
| | XY57501K0YW-0 | GLUE, YELLOW, N.W=1.0KG #575 @KG | |
| | XY6R301K000-0 | BAR,TIN,63/37,N.W=1.0KG @KG | |
| | XY74601K0WH-9 | OINTMENT HTC #SDL-746 NW=1.0KG WHITE @KG | |
| | XYALC01G000-2 | ALCOHOL V=1.0GALLON @GALLON | |
| | XYGLU00K5RD-7 | GLUE, RED, W=0.5KG TYPELESS FOR SMT @KG | |
| | XYRF801G000-7 | FLUX #RF-800 V=1.0 GALLON @ GALLON | |
| | XYWAX10K000-6 | ANTI-OXIDATION,WAX,W-1#,N.W=10KG,@KG | |
| HK11 | H01-ZMC12HS0100-3 | AC HEATSINK 17*15*30 AVR520 -- ME | |
| BK70 | H01-ZMC12S17A00-0 | AC PUN SHIELD DIGITAL ET | |
| 060 | ZSTBM3010BB-5 | SCREW ST BH 3X10 | |
| | 3SA-3071US-SUAA-1-2 | AC ESABD IAA SUPPLY BD AXIAL AVR430 | |
| C101 108 109 113 114 | CCZID0104NA-2 | CC 100N0F +80% -20% 50.0V F | |
| D111 114 | H01-DG1N04148NB-4 | D-SLP 1N4148 100.0V 150E-3A | |
| D101 102 104 105 106 107 110 112 301 | H01-DR1N04004NA-1 | D-SR 1N4004 400.0V 1.0A | |
| D113 | H01-DZ1N05231NB-1 | D-ZENER 1N5231B 5.1V 500MIOW | |
| D109 | H01-DZ1N5239BNB-A | D-ZENER 1N5239B 9.1V 500MIOW | |
| D115 116 | H01-DZMTZJ22BNB-8 | DIODE RECT MTZ J 22B 22V 0.5W | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|----------------------------|--------------------|---|------|
| R109 114 301 | RC3DI0102IN-9 | RCF 1K0 OHM +5% 250MI0W | |
| R105 111 | RC3DI0103IN-7 | RCF 10K0 OHM +5% 250MI0W | |
| R110 | RC3DI0104IN-5 | RCF 100K0 OHM +5% 250MI0W | |
| R1 | RC3DI0153IN-3 | RCF 15K0 OHM +5% 250MI0W | |
| R107 | RC3DI0272IN-6 | RCF 2K7 OHM +5% 250MI0W | |
| R102 103 | RC3DI047AIN-1 | RCF 4R7 OHM +5% 250MI0W | |
| R106 | RC3DI0562IN-8 | RCF 5K6 OHM +5% 250MI0W | |
| 3SA-3071US-SUAR-1-4 | | AC ESABD IAR SUPPLY BD RADIAL AVR430 | |
| C105 106 107 110 | CCKIC0103NA-9 | CC 10N0F +10% -10% 50.0V Y5P | |
| C118 | CCMOC0472NF-9 | CC 4N7F +20% -20% 250.0V Y5V | |
| C111 | CEHGC0477NN-6 | CE 470U0F +20% 25.0V 85C | |
| C112 | CEHGC0687NN-6 | CE 680U0F +20% 25.0V 85C | |
| C115 117 | CEHIC0105NN-7 | CE 1U0F +20% 50.0V 5X11 85C | |
| C116 | CEHIC0106NN-5 | CE 10U0F +20% 50.0V 85C | |
| C104 | CEHIC0107NN-3 | CE 100U0F +20% 50.0V 85C | |
| C203 204 205 | CFIOC0104NN-5 | CPM 100N0F +10% 250.0V | |
| C102 | CFLJC0224NN-6 | CPM 220N0F +5% 63.0V | |
| FH10 11 13 14 | H01-SOPS1FEHDNN-9 | TERMFUSEHLDR FUSE-HOLDER J4210020001X | |
| Q101 102 | H01-TRMPMSA06NNA-4 | TR-SLPLF MPSA06 N 500MI0A TO-92 | |
| G101 102 | H01-ZNMSA4004SN-4 | TERMLUG GND | |
| 3SA-3071US-SUSB-1-5 | | AC ESABD SMD SUPPLY BD AVR430 | |
| C701 702 | CZZFI0104BF-8 | CCCFMIC 100N0F +80% -20% 16.0V Y5V | |
| L701 702 | H01-FB2K52012NN-5 | FBEAD SURFACE MT 2500OHM FCM2012H-252T02 | |
| R701 | RS3AD0102NA-3 | RMGCFMIC 1K0 OHM +5% 62MI5W | |

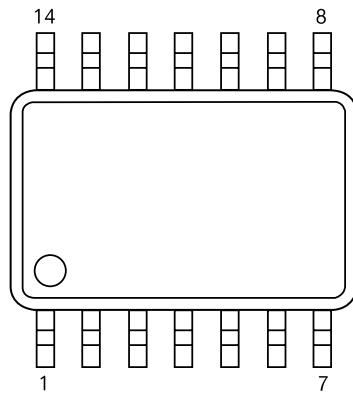
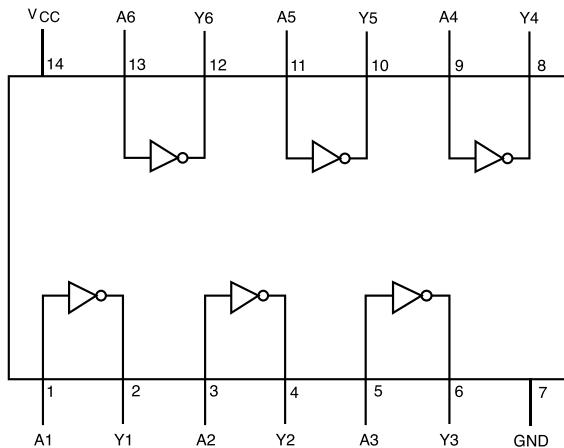
| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|---|--------------------------------|---|------|
| 3SA-3071US-VDMI-1-6 AC EMBD IMA VIDEO BD AVR430 | | | |
| For below rework | PBC11KVDI20-2 CCZID0104NA-2 | AVR630 VIDEO SINGLE PCB 197MM*247MM FR-1 CC 100N0F +80% -20% 50.0V F | |
| C152 199 | CEHEC0227NN-A | CE 220U0F +20% 10.0V 85C | |
| C121 | CEHFC0106NN-4 | CE 10U0F +20% 16.0V 85C 5X11 | |
| C117 | CEHFC0476NN-4 | CE 47U0F +20% 16.0V 85C | |
| L101 | H01-FB05B3580NN-1 | BEAD AXIAL/TAP,HC3580 80.5ohm | |
| IC18 | H01-ICKIA7806I2-9 | IC KIA7806AP VOLTQAGE REGULATOR TO-220AB | |
| IC40 51 52 | H01-ICPC17T10B1-2 | IC PHOTOCOUPLER PC-17T1 DIP4 KODENSHI | |
| Y100 | H01-OSXBE14M3AU-7 | CRYSTAL 14.31818MHz WOOIN | |
| Y101 | H01-OSXBE17M7AU-9 | CRYSTAL 17.734475MHz WOOIN | |
| SK11 12 | H01-RLL0517811A-A | RELAY D3009(1-1462033-4) | |
| NJ51 52 53 | H01-SOJW2350SNN-A | JACK PHONE 3.6 EP-1401A 1P BK | |
| NJ50 | SOPA96063NN-0 | JACK D-SUB 9P 87204-6063 W/DUST COVER BK | |
| NJ92 93 94 95 96 97 98 | H01-SORA11Y00NN-5 | JACK RCA+S VIDEO C5016031DN | |
| NJ91 | H01-SORA90GNDNN-8 | JACK RCA 9P JB090148TN GNDCAP RDX3,BUX3,GNX3 | |
| NJ81 | H01-SOSS9CKX3NN-9 | JACK PHONE 6.35 H70980110S 9P BK | |
| W101 | H01-WC1160705C1-9 | WCL 070-05-05 UL1007 HOOK-UP 16 70MM BK 5 5 | |
| P605 | H01-WN06AB00000-0 | CONN 2.0MM 6 MA R NAT GT201-6P-LS | |
| P500 | H01-WN06SB00000-8 | CONN 2.0MM 6 MA ST NAT GT201-6P-TS | |
| P604 | H01-WN06SB01000-9 | CNT PLUG BD'BD PLUG 2.0mm 35336-0610 6P | |
| N902 | H01-WN17AB00000-4 | CONN 2.0MM 17 MA R NAT SOCKET MOLEX 35237-1710 0 0 | |
| P901 | H01-WN17SB00000-1 | CONN 2.0MM 17 MA ST NAT MOLEX 35336-1710 0 0 | |
| N602 | H01-WN19AB00000-9 | CONN 2.0MM 19 MA R NAT SOCKET MOLEX 35237-1910 0 0 | |
| P601 | H01-WN19AI00000-2 | CONN 1.25MM 19 FE ANG WH GF120-19S-LS 2794 A6 | |
| P602 603 | H01-WN19SB00000-6 | CONN 2.0MM 19 MA ST NAT MOLEX 35336-1910 0 0 | |
| N800 | H01-WS4265913FN-5 | CNT ASSY 2.0MM 4P 590MM SHIELD 26AWG UL2547 1/3 | |
| | XY0N618M3SW-A | GLUE FURROW W=6MM L=18.3M SS WHITE @ROLL | |
| | XY0P523K000-A | WIRE,IRON,D=0.5MM,N.W=23KG @KG | |
| | XY0P801K000-A | WIRE TIN D=0.8MM N.W=1.0KG @KG | |
| | XY1N209M0DW-4 | GLUE TAPE W=12MM L=9.0M DS WHITE @ROLL | |
| | XY1N218M3SW-4 | GLUE FURROW W=12MML=18.3M SS WHITE @ROLL | |
| | XY1P202K000-1 | WIRE, TIN, D=1.2MM N.W=2.0KG @KG | |
| | XY30155G00-0 | TCE,CLEANER,-301#,V=55GALLON,TYPELESS @GALLON | |
| | XY4N836M5CL-9 | GLUE TRANSPARENT W=48MM L=36.5M @ROLL | |
| | XY6R301K000-0 | BAR,TIN,63/37,N.W=1.0KG @KG | |
| 042 | XYALC01G000-2 | ALCOHOL V=1.0GALLON @GALLON | |
| | XYGLU00K5RD-7 | GLUE, RED, W=0.5KG TYPELESS FOR SMT @KG | |
| 041 | XYRF801G000-7 | FLUX #RF-800 V=1.0 GALLON @ GALLON | |
| | XYWAX10K000-6 | ANTI-OXIDATION,WAX,W-1#,N.W=10KG,@KG | |
| BK50 | H01-ZMC12S16A00-A | BKT GROUND | |
| 3SA-3071US-VDAA-1-4 AC ESABD IAA VIDEO BD AXIAL AVR430 | | | |
| D102 104 400 | H01-DG1N04148NB-4 | D-SLP 1N4148 100.0V 150E-3A | |
| D108 | H01-DZ1N5239BNB-A | D-ZENER 1N5239B 9.1V 500MI0W | |
| L100 102 109 | H01-FB05B3580NN-1 | BEAD AXIAL/TAP,HC3580 80.5ohm | |
| L104 105 106 108 110 801 | H01-LAINB0470CR-2 | LF 47U0H +10% 5.8 OHM 500MI0A | |
| L107 | H01-LAINB056ACR-0 | LF 5U60H +10% 5.8 OHM 500MI0A | |
| R131 132 133 134 135 161 162 163 | RC3DI0102IN-9 | RCF 1K0 OHM +5% 250MI0W | |
| R160 | RC3DI0103IN-7 | RCF 10K0 OHM +5% 250MI0W | |
| R204 | RC3DI0121IN-5 | RCF 120R0 OHM +5% 250MI0W | |
| R801 802 | RC3DI022AIN-2 | RCF 2R2 OHM +5% 250MI0W | |
| R203 407 | RC3DI0471IN-0 | RCF 470R0 OHM +5% 250MI0W | |
| 3SA-3071US-VDAR-1-6 AC ESABD IAR VIDEO BD RADIAL AVR430 | | | |
| C142 143 171 174 | CCJIC0390NE-2 | CC 39P0F +5% -5% 50.0V NP0 | |
| C183 | CCKIC0103NA-9 | CC 10N0F +10% -10% 50.0V Y5P | |

| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|--|-------------------|--|------|
| C202 | CCKIC0223NN-6 | CC 22N0F +10% -10% 50.0V Z5R | |
| C501 | CEHDC0107NN-5 | CE 100U0F +20% 6.3V 85C 5X11 | |
| C172 186 196 | CEHEC0107NN-9 | CE 100U0F +20% 10.0V 5X11 85C | |
| C100 102 103 105 106 108 109 111 136 138 203 205 289 295 | CEHEC0227NN-A | CE 220U0F +20% 10.0V 85C | |
| C130 131 132 133 134 135 | CEHEC0477MN-A | CE 470U0F +20% 10.0V 6.3X11 85C | |
| C901 902 903 904 905 906 907 908 | CEHFC0106MN-5 | CE 10U0F 16.0V 5X11 P2.5MM | |
| C101 104 107 110 116 122 137 204 206 213 | CEHFC0106NN-4 | CE 10U0F +20% 16.0V 85C 5X11 | |
| C909 910 | CEHFC0107MN-3 | CAP ELEC 100U0F 16.0V M 5X11 P2.5MM | |
| C151 188 190 192 194 291 293 | CEHFC0107NN-2 | CE 100U0F +20% 16.0V 85C | |
| C115 153 161 313 | CEHFC0476NN-4 | CE 47U0F +20% 16.0V 85C | |
| C128 164 167 169 | CEHIC0105NN-7 | CE 1U0F +20% 50.0V 5X11 85C | |
| C185 198 | CEHIC0106NN-5 | CE 10U0F +20% 50.0V 85C | |
| C184 201 | CEHIC0225NN-0 | CE 2U2F +20% 50.0V 85C 5X11 | |
| C176 | CEHIC0474NN-9 | CE 470N0F +20% 50.0V 85C 5X11 | |
| C503 504 505 506 507 | CEHKC0105MN-5 | CE 1U0F +20% 100.0V 85C | |
| C165 | H01-CEMIC0334AH-4 | CAP ELEC 0.33UF M 5X11 SHL SAMYOUNG | |
| C144 | CPIIC0223NN-4 | CPF 22N0F +10% 50.0V | |
| C168 | CPIIC0682NN-5 | CPF 6N8F +10% 50.0V | |
| Q101 104 111 | H01-TR2SA933ANW-2 | TR-SLPLF 2SA933ASR P -3.0A -20V | |
| Q100 112 114 | H01-TR2SC1740NW-9 | TR-SLPLF 2SC1740S R N 150M10A 50V | |
| Q107 110 | H01-TRDTC114YNW-6 | TR-SLPLF DTC114YSA N 100M10A | |
| Q400 501 502 | H01-TRKTA107MNA-7 | TR-SLPSWA KRA107M P | |
| 3SA-3071US-VDST-1-2 AC ESABD SMD VIDEO BD AVR430 | | | |
| C163 | CZEII0100BE-0 | CCCFMIC 10P0F +0P5F -0P5F 50.0V NP0 | |
| C112 113 114 118 119 120 125 126 155 156 157 158 159 160 178 180 921 922 923 924 925 926 927 928 | CZJII0101BE-2 | CCCFMIC 100P0F +5% -5% 50.0V NP0 0603 | |
| C123 | CZJII0181BE-0 | CCCFMIC 180P0F +5% -5% 50.0V NP0 | |
| C175 | CZJII0270BE-1 | CCCFMIC 27P0F +5% -5% 50.0V NP0 | |
| C177 | CZJII0330BE-9 | CCCFMIC 33P0F +5% -5% 50.0V NP0 | |
| C124 200 | CZJII0331BE-7 | CCCFMIC 330P0F +5% -5% 50.0V NP0 | |
| C173 181 187 197 | CZKII0103BC-5 | CCCFMIC 10N0F +10% -10% 50.0V X7R | |
| C170 | CZKII0561BC-8 | CCCFMIC 560P0F +10% -10% 50.0V X7R | |
| C150 154 162 189 191 193 195 248 292 294 311 401 502 508 509 801 804 911 912 913 914 915 916 917 918 | CZZFI0104BF-8 | CCCFMIC 100N0F +80% -20% 16.0V Y5V | |
| D101 106 107 109 110 501 502 503 504 505 506 507 801 802 | H01-DS1S50094NB-A | D-SLP 1SS355 35.0V 225M10A | |
| L501 502 503 504 | H01-FB2K52012NN-5 | FBEAD SURFACE MT 2500OHM FCM2012H-252T02 | |
| IC19 20 | H01-ICBU4094BD3-2 | IC CMOS BU4094BF SOP16 | |
| IC22 | H01-ICLC74763I4-1 | IC OSD LC74763M SOP30 | |
| IC901 902 903 904 | H01-ICLM02068D2-A | IC-OPERAMP NJM2068M DUAL SOP8 | |
| IC14 25 26 | H01-ICMM1501XDL-A | IC-VIDEO SW MM1501XNRE SOT-26B | |
| IC13 15 23 | H01-ICMM1505XDL-3 | IC-VIDEOPROC MM1505XNRE AMPLIFIER&DRIVER | |
| IC27 | H01-ICMM1511XDL-8 | IC-VIDEO SW MM1511XNRE SOT-26B | |
| IC10 11 12 | H01-ICNJM2296D3-7 | IC-LINEAR NJM2296 | |
| IC50 | H01-ICUPD4721D8-3 | IC-SPECFUNC UPD4721 DRIVERS/RECEIVERS CMOS RS-232C | |
| J101 104 105 106 108 112 113 125 126 128 132 135 138 139 234 257 308 309 310 315 316 317 911 912 913 914 915 916 R157 158 180 184 921 922 923 924 925 926 927 928 | RS3AD0000NA-0 | RMGCFMIC 0 OHM +0% 62M15W | |
| R190 | RS3AD0101NA-5 | RMGCFMIC 100R0 OHM +5% 62M15W | |
| R130 148 149 176 183 | RS3AD0102NA-3 | RMGCFMIC 1K0 OHM +5% 62M15W | |

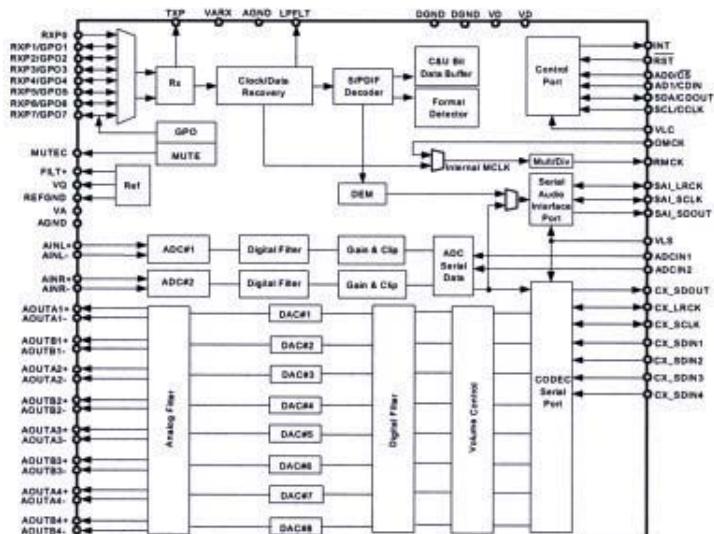
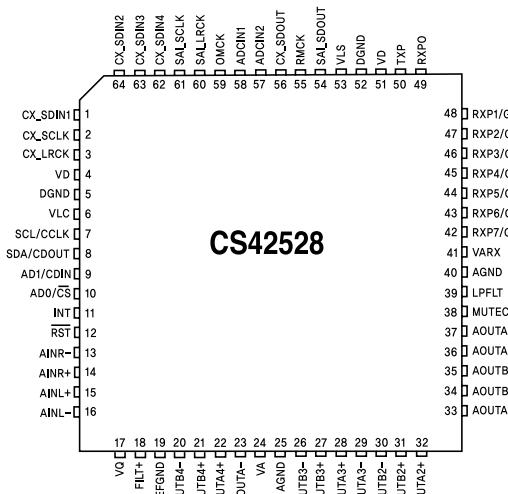
| REF NO. | PARTS NO. | DESCRIPTION | TYPE |
|---|-------------------|--------------------------------------|------|
| R112 113 114 118 119 120 124 125 126 159 165 175 188 191 199 206 207 208 | RS3AD0103NA-1 | RMGCFMIC 10K0 OHM +5% 62MI5W | |
| R510 941 942 943 944 945 946 947 948 | RS3AD0104NA-A | RMGCFMIC 100K0 OHM +5% 62MI5W | |
| R153 155 | RS3AD0105NA-8 | RES CHIP 1M 1/16W +/-5% 0603 | |
| R150 154 156 | RS3AD0121NA-A | RMGCFMIC 120R0 OHM +5% 62MI5W | |
| R146 147 | RS3AD0123NA-6 | RMGCFMIC 12K0 OHM +5% 62MI5W | |
| R186 | RS3AD0124NA-4 | RMGCFMIC 120K0 OHM +5% 62MI5W | |
| R931 932 933 934 935 936 937 938 | RS3AD0151NA-1 | RMGCFMIC 150R0 OHM +5% 62MI5W | |
| R152 | RS3AD0152NA-A | RMGCFMIC 1K5 OHM +5% 62MI5W | |
| R171 198 | RS3AD0154NA-6 | RMGCFMIC 150K0 OHM +5% 62MI5W | |
| R170 | RS3AD0200NA-3 | RES,CHIP 20 OHM 1/16W +/-5% 0603 | |
| R167 173 | RS3AD0222NA-4 | RMGCFMIC 2K2 OHM +5% 62MI5W | |
| R187 | RS3AD0224NA-0 | RMGCFMIC 220K0 OHM +5% 62MI5W | |
| R192 | RS3AD0243NA-7 | RMGCFMIC 24K0 OHM +5% 62MI5W | |
| R200 511 | RS3AD0271NA-2 | RMGCFMIC 270R0 OHM +5% 62MI5W | |
| R193 | RS3AD0272NA-0 | RMGCFMIC 2K7 OHM +5% 62MI5W | |
| R166 172 | RS3AD0333NA-6 | RMGCFMIC 33K0 OHM +5% 62MI5W | |
| R189 406 504 | RS3AD0392NA-1 | RMGCFMIC 3K9 OHM +5% 62MI5W | |
| R508 512 | RS3AD0470NA-7 | RMGCFMIC 47R0 OHM +5% 62MI5W | |
| R503 | RS3AD0471NA-5 | RMGCFMIC 470R0 OHM +5% 62MI5W | |
| R501 502 | RS3AD0472NA-3 | RMGCFMIC 4K7 OHM +5% 62MI5W | |
| R405 509 513 | RS3AD0473NA-1 | RMGCFMIC 47K0 OHM +5% 62MI5W | |
| R197 | RS3AD0513NA-4 | RMGCFMIC 51K0 OHM +5% 62MI5W | |
| R101 104 107 110 116 122 127 128 129 168 174 178 | RS3AD0680NA-7 | RMGCFMIC 68R0 OHM +5% 62MI5W | |
| R151 | RS3AD0682NA-3 | RMGCFMIC 6K8 OHM +5% 62MI5W | |
| R100 102 103 105 106 108 109 111 115 117 121 123 136 137 | RS3AD0750NA-1 | RMGCFMIC 75R0 OHM +5% 62MI5W | |
| R169 | RS3AD0822NA-2 | RMGCFMIC 8K2 OHM +5% 62MI5W | |
| Q102 103 | H01-TRDTA114YNI-9 | TR-SSD DTA114YKA P 10K0 OHM 47K0 OHM | |
| Q105 106 113 | H01-TRDTC114YNI-5 | TR-SSD DTC114YKA N 10K0 OHM 47K0 OHM | |

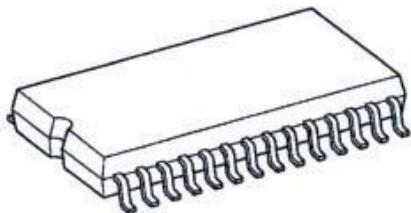
IC BLOCK DIAGRAMS

1.M74HCU04
DSP PART IC701.702

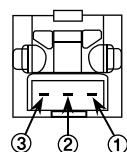


2.CS42528
DSP PART IC700



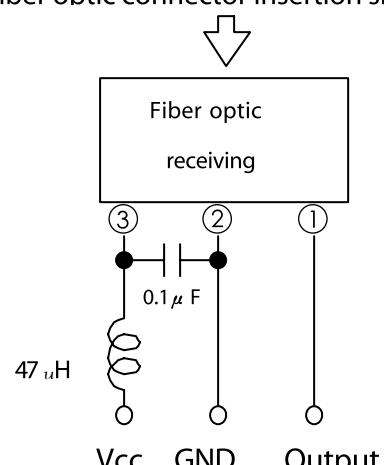
TC9273F**SOP28-P-450-1.27**

TOTX179L
DSP PART NJ76



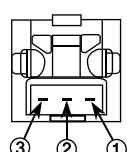
Pin connection
1. Output
2. GND
3. Vcc

Fiber optic connector insertion side



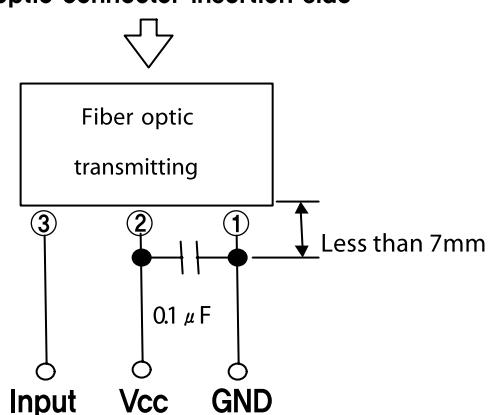
(Bottom View)

TORX179L
DSP PART NJ74.NJ75
SUPPLY PART NJ79



Pin connection
1. GND
2. Vcc
3. Input

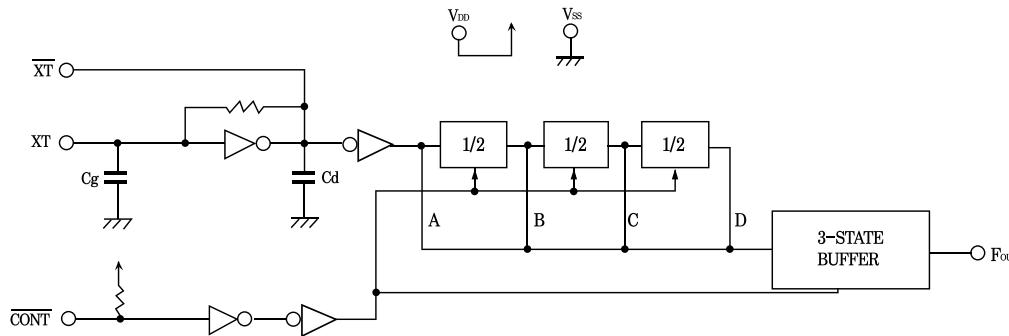
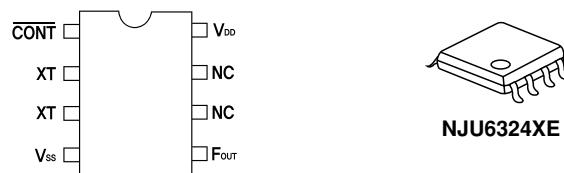
Fiber optic connector insertion side



(BOTTOM VIEW)

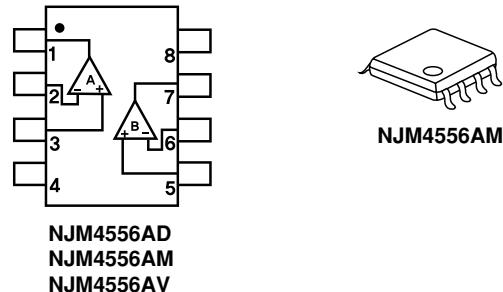
5.NJM6324
DSP PART

IC803



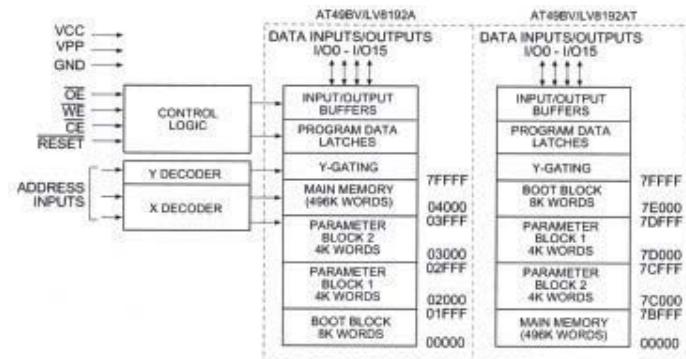
6.NJM4566AM
PROCESSOR PART

IC22

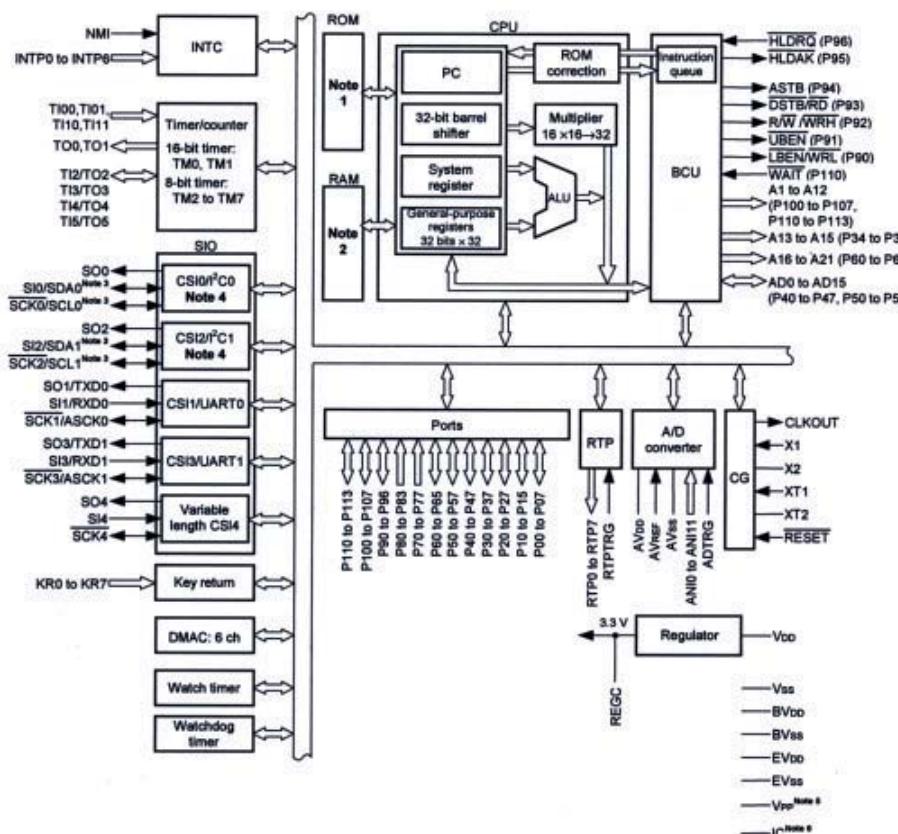
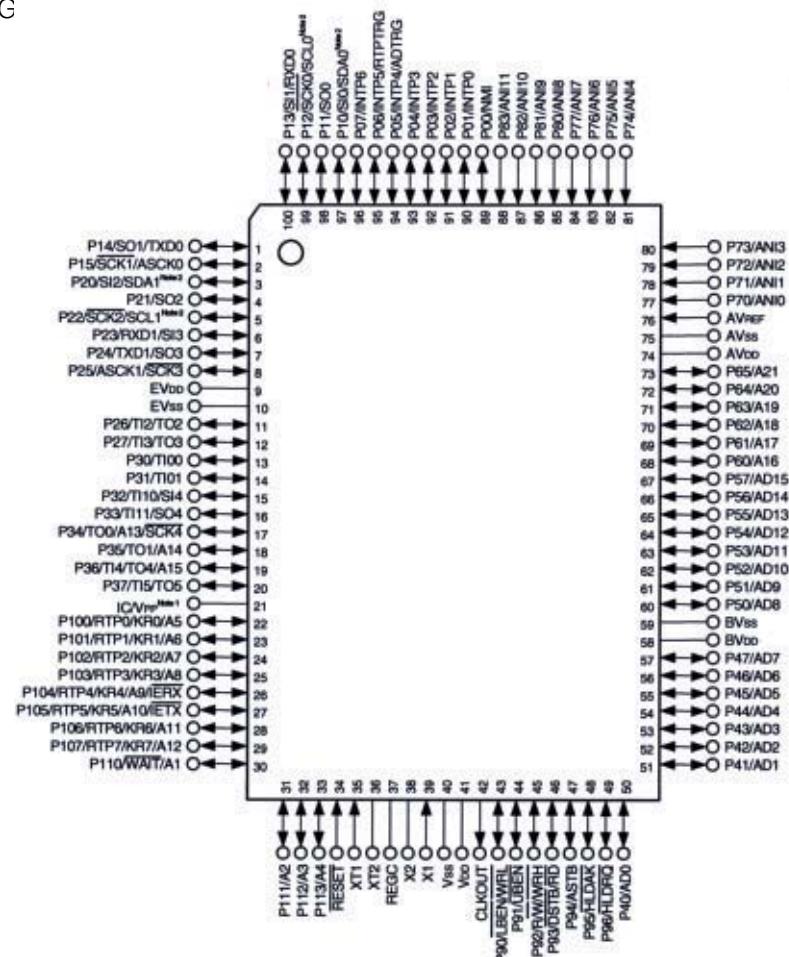


7.AT492V8192A
DSP PART

IC804

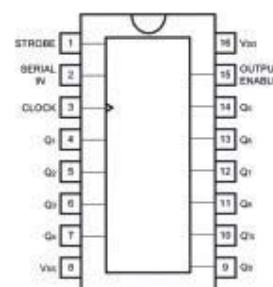
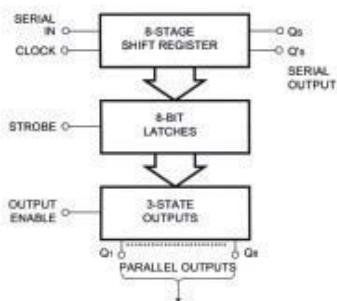
AT49BV/LV8192A(T) TSOP Top View**Type 1****AT49BV/LV8192A(T) Block Diagram**

8.UPD70F3033BG
DSP PART

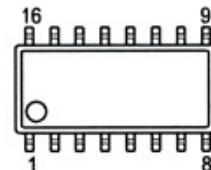


9.BU4094BCF
DSP PART
VIDEO PART
FRONT PART

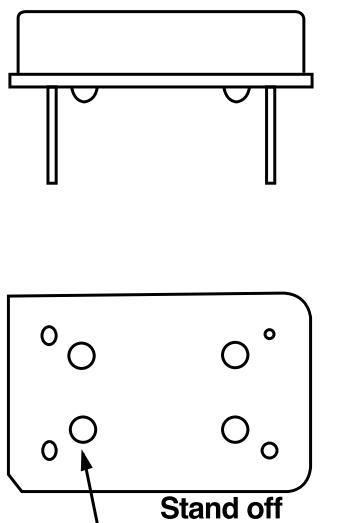
IC602
IC19.IC20
IC101



BU4094BCF



10.VCOX 24M576HZ
DSP PART Y800

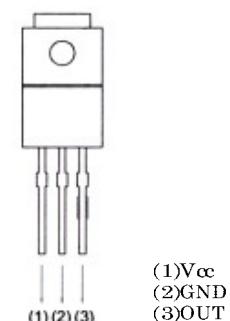
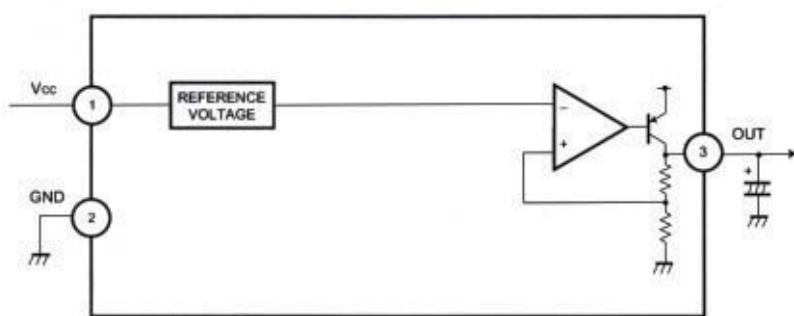


<14 PIN DIP>

| PIN | CONNECTION |
|------|----------------------|
| # 1 | INH or No Connection |
| # 7 | Ground |
| # 8 | Output |
| # 14 | Vdc |

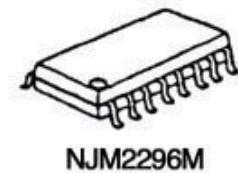
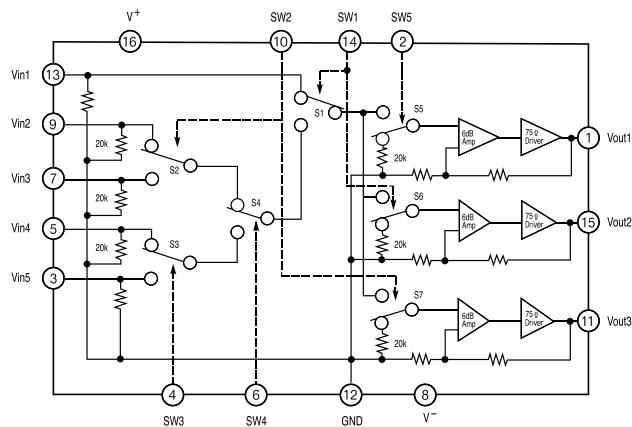
11.BA033T
MAIN PART IC53

BA033T Series



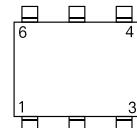
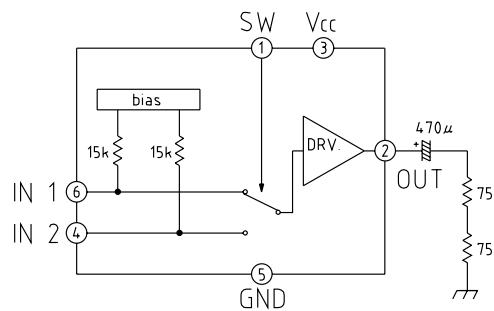
TO220FP

12.NJM2296M
VIDEO PART
IC10.11.12

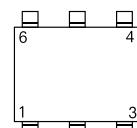
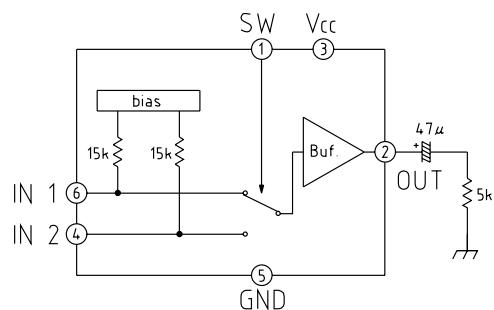


NJM2296M

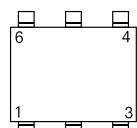
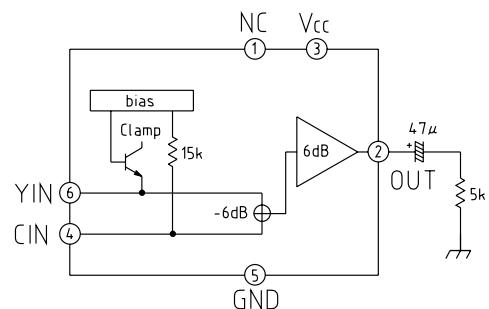
13.MM1505
VIDEO PART
IC13.15.23



14.MM1501
VIDEO PART
IC14.25.26

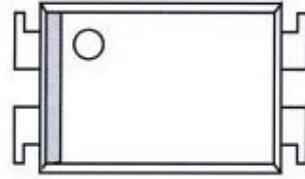
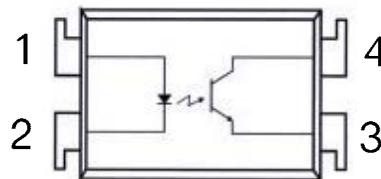


15.MM1511
VIDEO PART
IC27



16.PHOTOCOUPLER PC-17T1
VIDEO PART

IC40.51.52



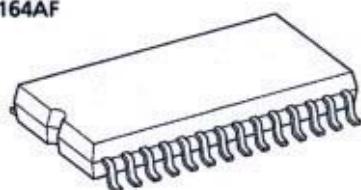
PIN Connections

- 1.Anode
- 2.Cathode
- 3.Emitter
- 4.Collector

17.TC9162AF PROCESSOR PART

IC14

TC9162AF
TC9163AF
TC9164AF



SOP28-P-450-1.27

PIN CONNECTION (TOP VIEW)

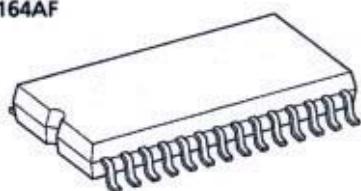
TC9162AN/AF

| | | | |
|--------------------|----|----|--------------------|
| V _{SS} | 1 | 28 | V _{DD} |
| L-S ₁ | 2 | 27 | R-S ₁ |
| L-S ₂ | 3 | 26 | R-S ₂ |
| L-COM ₁ | 4 | 25 | R-COM ₁ |
| L-S ₃ | 5 | 24 | R-S ₃ |
| L-S ₄ | 6 | 23 | R-S ₄ |
| L-COM ₂ | 7 | 22 | R-COM ₂ |
| L-S ₅ | 8 | 21 | R-S ₅ |
| L-S ₆ | 9 | 20 | R-S ₆ |
| L-COM ₃ | 10 | 19 | R-COM ₃ |
| L-S ₇ | 11 | 18 | R-S ₇ |
| L-COM ₄ | 12 | 17 | R-COM ₄ |
| ST | 13 | 16 | DATA |
| GND | 14 | 15 | CK |

18.TC9163AF PROCESSOR PART

IC3

TC9162AF
TC9163AF
TC9164AF



SOP28-P-450-1.27

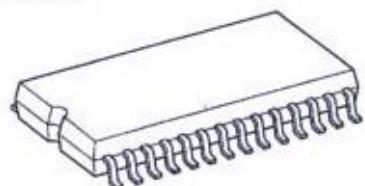
TC9162AN/AF

| | | | |
|--------------------|----|----|--------------------|
| V _{SS} | 1 | 28 | V _{DD} |
| L-S ₁ | 2 | 27 | R-S ₁ |
| L-S ₂ | 3 | 26 | R-S ₂ |
| L-COM ₁ | 4 | 25 | R-COM ₁ |
| L-S ₃ | 5 | 24 | R-S ₃ |
| L-S ₄ | 6 | 23 | R-S ₄ |
| L-COM ₂ | 7 | 22 | R-COM ₂ |
| L-S ₅ | 8 | 21 | R-S ₅ |
| L-S ₆ | 9 | 20 | R-S ₆ |
| L-COM ₃ | 10 | 19 | R-COM ₃ |
| L-S ₇ | 11 | 18 | R-S ₇ |
| L-COM ₄ | 12 | 17 | R-COM ₄ |
| ST | 13 | 16 | DATA |
| GND | 14 | 15 | CK |

19.TC9482F
PROCESSOR PART

IC19

TC9482F



SOP28-P-450-1.27

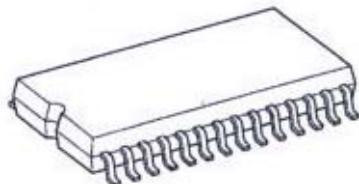
| | | | |
|----------|----|----|----------|
| VSS | 1 | 28 | VDD |
| NC | 2 | 27 | TEST |
| L-OUTA | 3 | 26 | R-OUTA |
| L-INA | 4 | 25 | R-INA |
| L-A-GNDA | 5 | 24 | R-A-GNDA |
| L-OUTB | 6 | 23 | R-OUTB |
| L-INB | 7 | 22 | R-INB |
| L-A-GNDB | 8 | 21 | R-A-GNDB |
| L-OUTC | 9 | 20 | R-OUTC |
| L-INC | 10 | 19 | R-INC |
| L-A-GNDC | 11 | 18 | R-A-GNDC |
| CS1 | 12 | 17 | CS2 |
| GND | 13 | 16 | STB |
| CK | 14 | 15 | DATA |

20.TC9481F
PROCESSOR

IC28

TC9481F

TC9481F



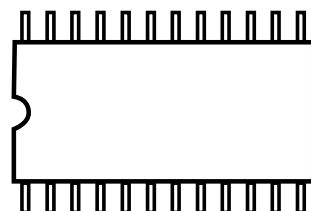
SOP28-P-450-1.27

| | | | |
|----------|----|----|----------|
| NC | 1 | 28 | NC |
| VSS | 2 | 27 | VDD |
| TONE-IN | 3 | 26 | TONE-IN |
| TRE-COM | 4 | 25 | TRE-COM |
| BASS1 | 5 | 24 | BASS1 |
| BASS-COM | 6 | 23 | BASS-COM |
| NC | 7 | 22 | NC |
| NC | 8 | 21 | NC |
| BASS2 | 9 | 20 | BASS2 |
| TONE-OUT | 10 | 19 | TONE-OUT |
| CS1 | 11 | 18 | CS1 |
| GND | 12 | 17 | STB |
| CK | 13 | 16 | DATA |
| NC | 14 | 15 | NC |

21.KIC9459F
PROCESSOR

IC2, 18

KIC9459F

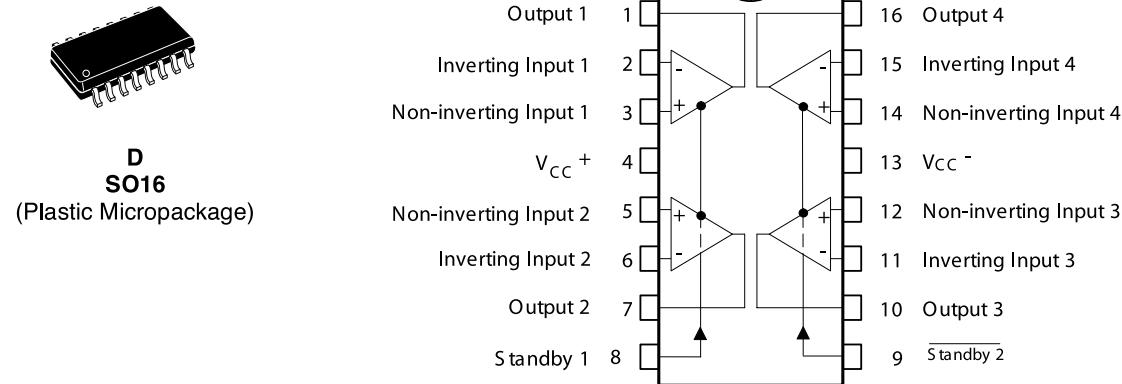


| | | | |
|---------|----|----|---------|
| VSS | 1 | 24 | VDD |
| L-OUT | 2 | 23 | R-OUT |
| NC | 3 | 22 | NC |
| L-IN | 4 | 21 | R-IN |
| L-LD1 | 5 | 20 | R-LD1 |
| L-LD2 | 6 | 19 | R-LD2 |
| L.A.GND | 7 | 18 | R.A.GND |
| NC | 8 | 17 | NC |
| CS1 | 9 | 16 | CS2 |
| NC | 10 | 15 | NC |
| GND | 11 | 14 | STB |
| CK | 12 | 13 | DATA |

22.TSH95

VIDEO PART

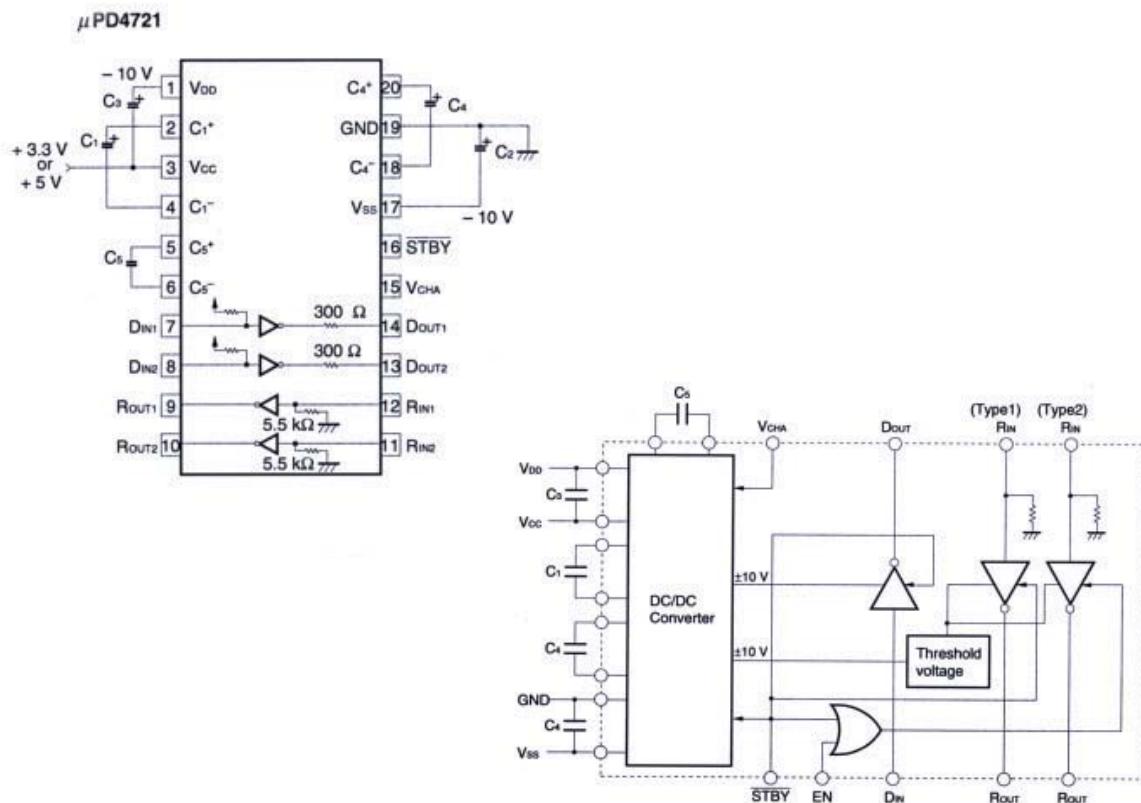
IC17



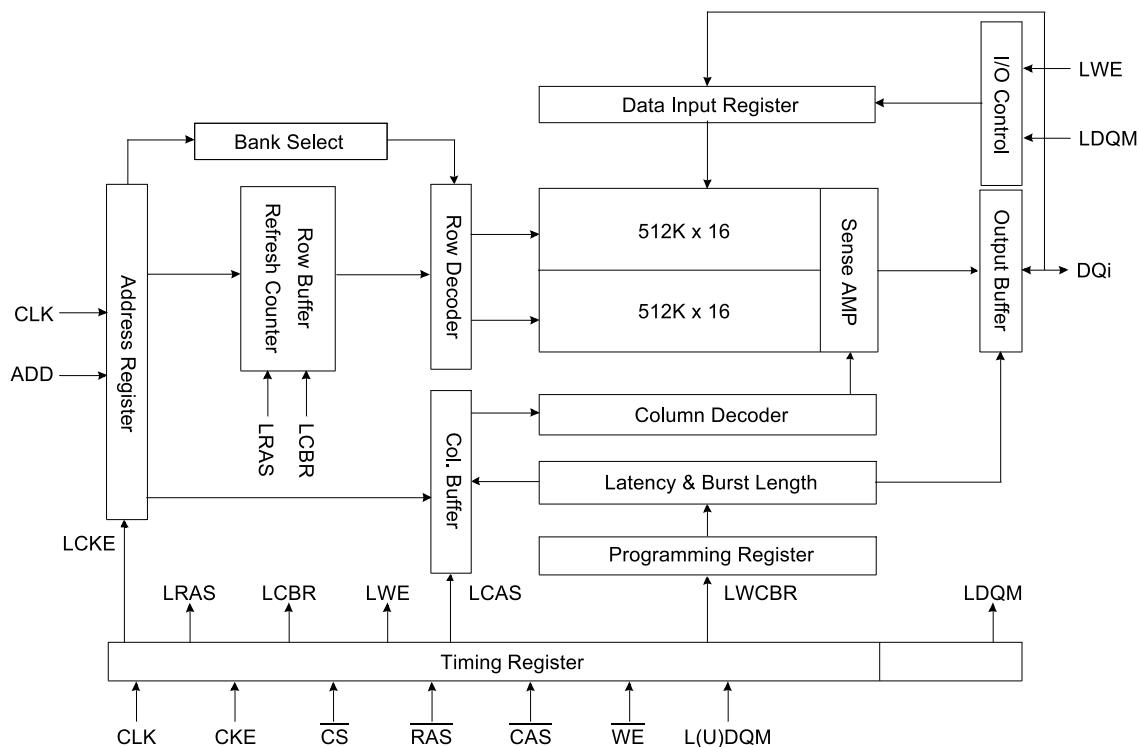
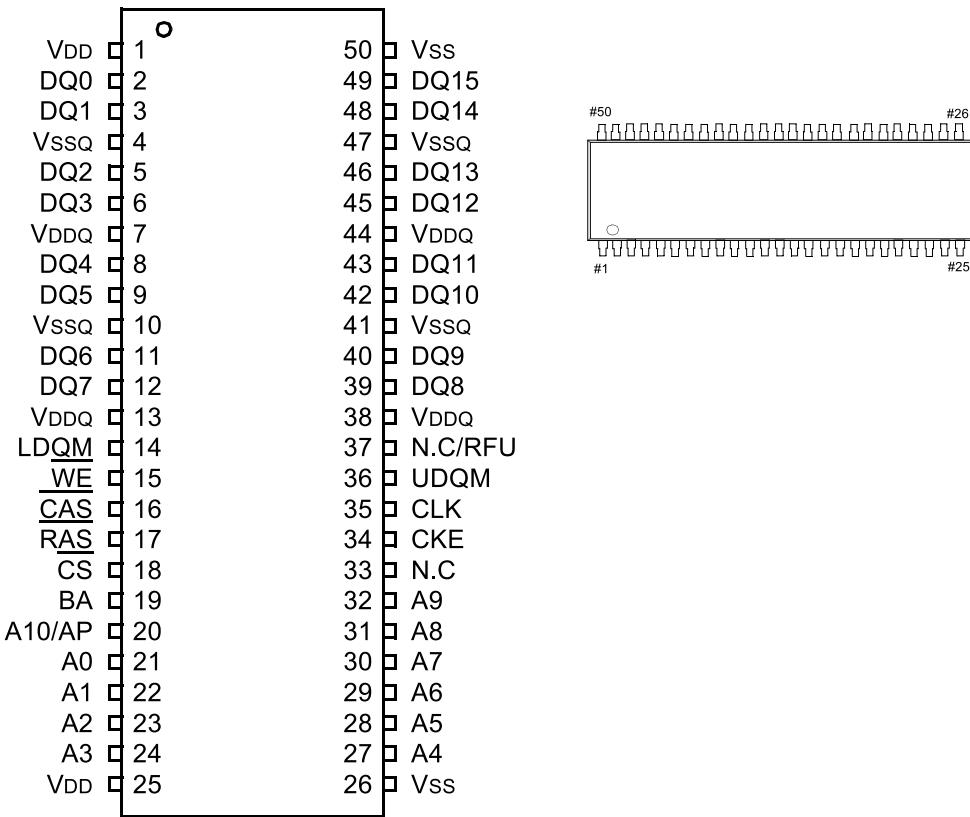
23.MPD4721

VIDEO PART

IC50

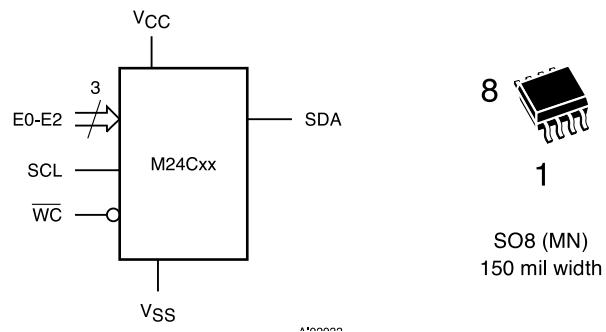


24.K4S161622D-TC80
DSP PART IC805



25.M24C04
DSP PART

IC603



M24Cxx

16Kb/8Kb/4Kb/2Kb/1Kb

| | | | |
|------------------------|---|---|-----------------|
| NC / NC / NC / E0 / E0 | 1 | 8 | V _{CC} |
| NC / NC / E1 / E1 / E1 | 2 | 7 | WC |
| NC / E2 / E2 / E2 / E2 | 3 | 6 | SCL |
| V _{SS} | 4 | 5 | SDA |

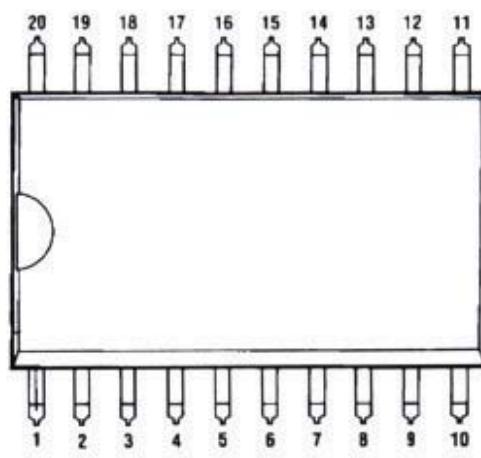
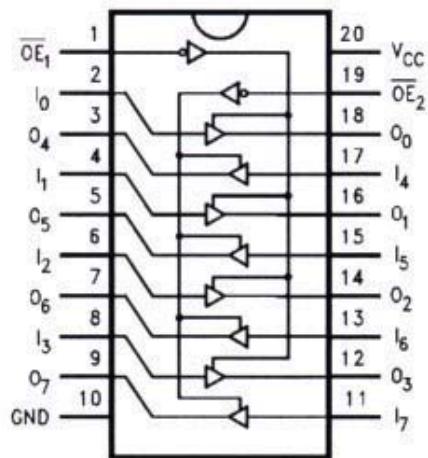
26.74VHC2441A
DSP PART

IC802

74VHCT24A
DSP PART

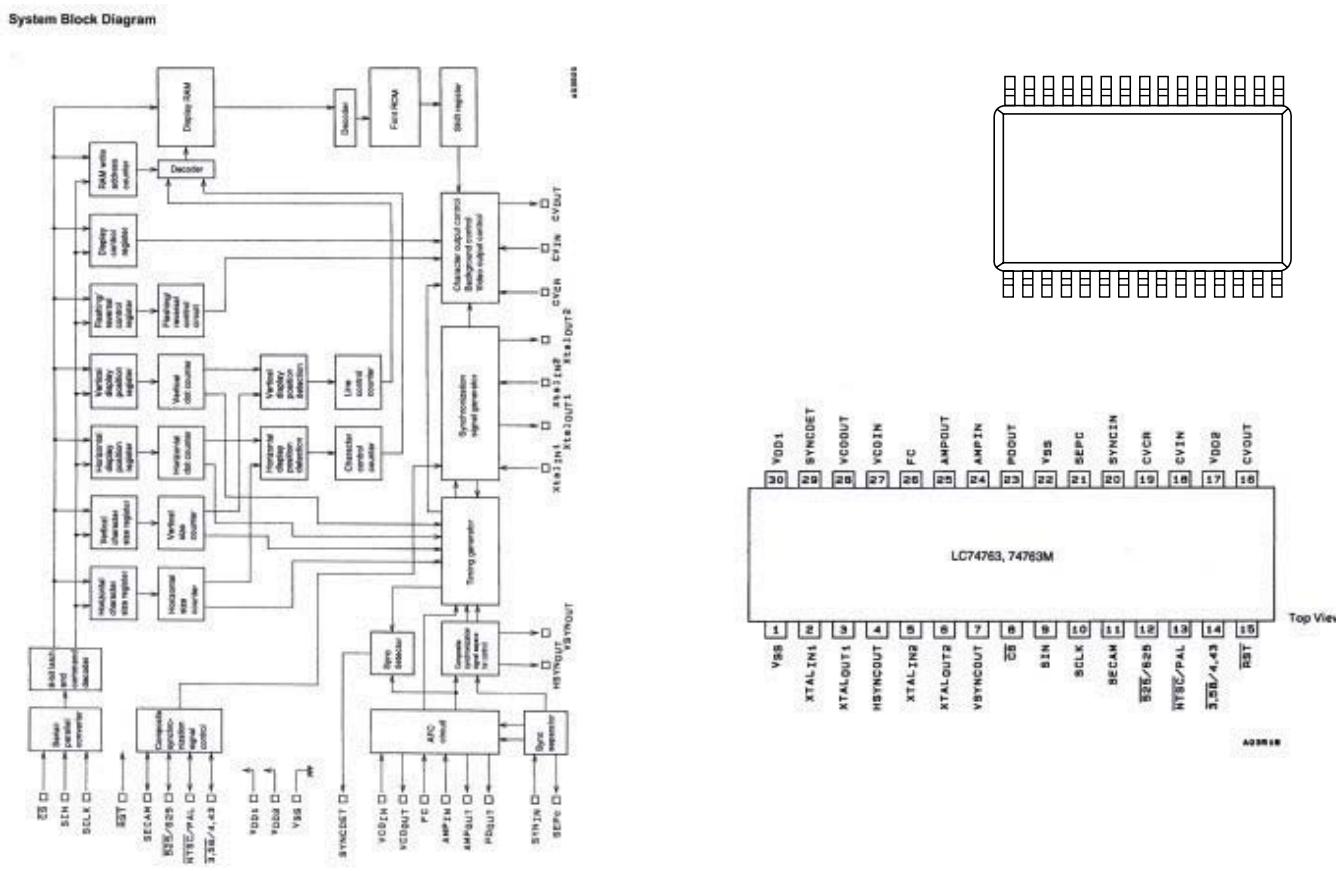
IC801

Connection Diagram



27.2C74763M
VIDEO PART

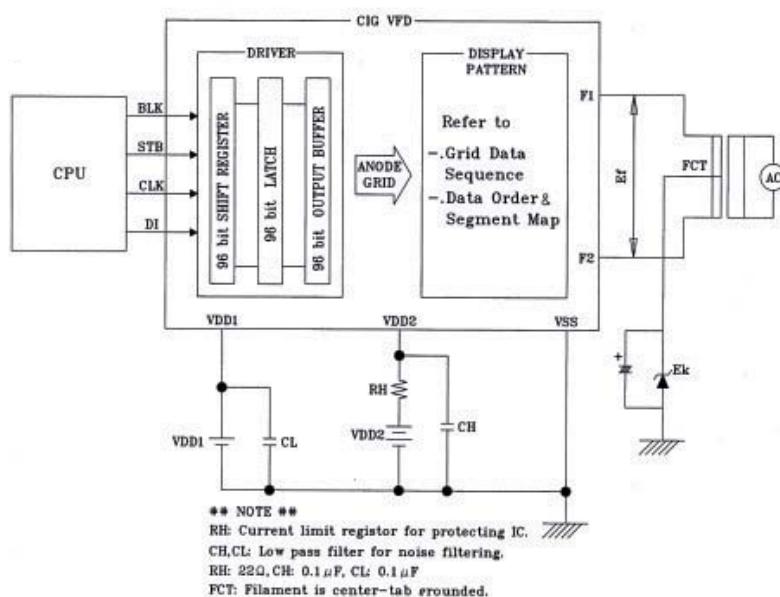
IC22

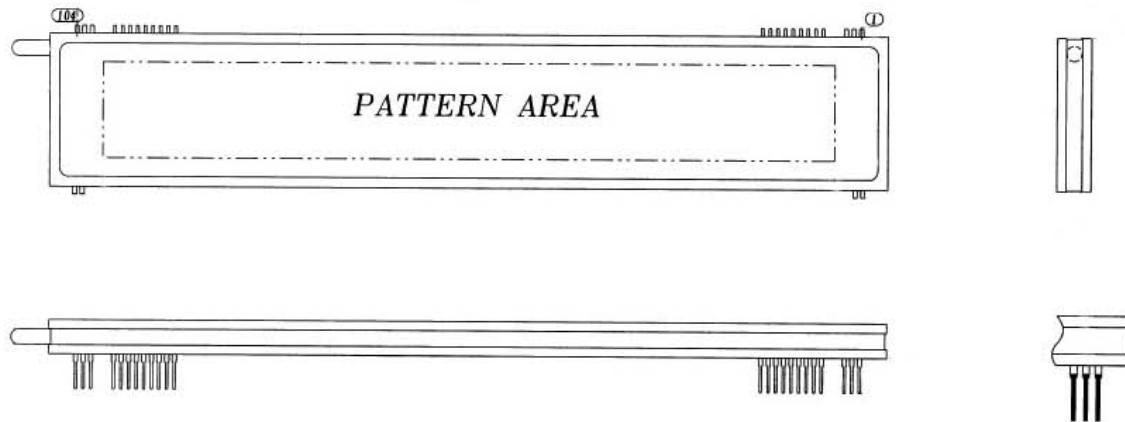


28.FL

HCA-18LL03
FRONT PART

DP10





PIN CONNECTION

| | | | | | | | | | | | | | | | | | | | | | |
|------------|-----|-----|-----|-----|-----|------|-----|-----|-----|----|----|-----|-----|------|-------|------|----|----|----|----|----|
| PIN NO. | 104 | 103 | 102 | 101 | 100 | 99 | 98 | 97 | 96 | 95 | 94 | 93 | 92 | 91 | 90~15 | 14~6 | 5 | 4 | 3 | 2 | 1 |
| CONNECTION | F2 | F2 | F2 | NP | NP | VDD2 | VSS | VSS | CLK | D0 | DI | BLK | STB | VDD1 | NP | NC | NP | NP | F1 | F1 | F1 |

*Notes

Fn : Filament Pin

NP : No Pin

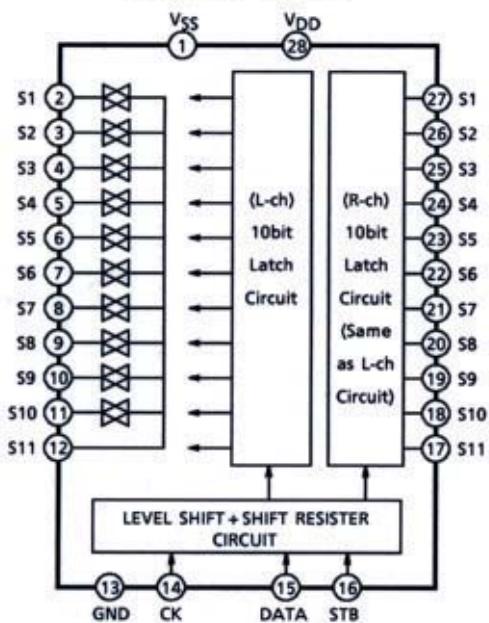
NC : No Connection Pin

* DO(Serial data output) : Be left open if not used.

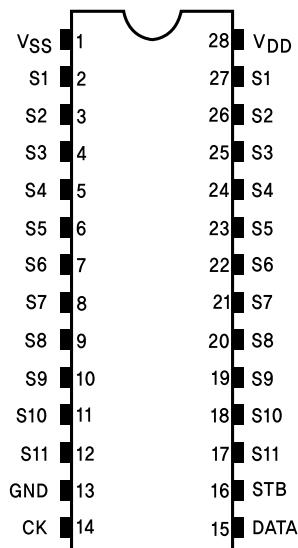
MODEL : HCA-18LL03
OUTER DIMENSIONS
Rev. ① 18-Feb-2003

3.PROCESSOR APRT IC6.IC10

TC9273N, TC9273F

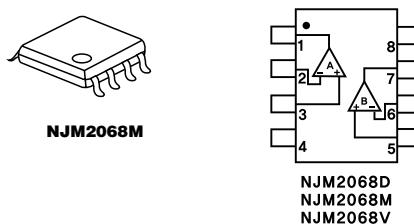


TC9273N, TC9273F

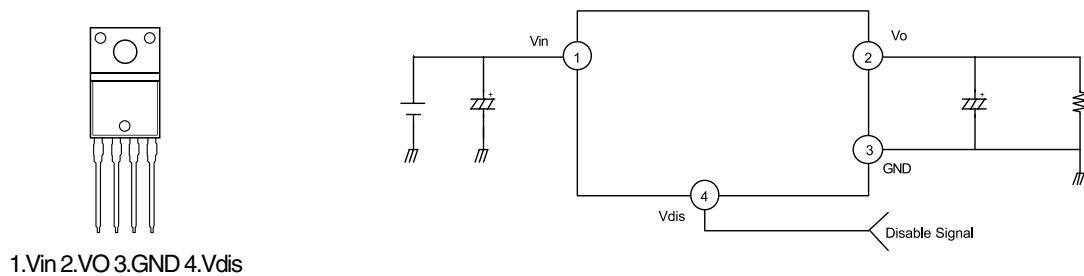


29.NJM2068M
 DSP PART
 PROCESSOR PART
 MAIN PART
 VIDEO PART

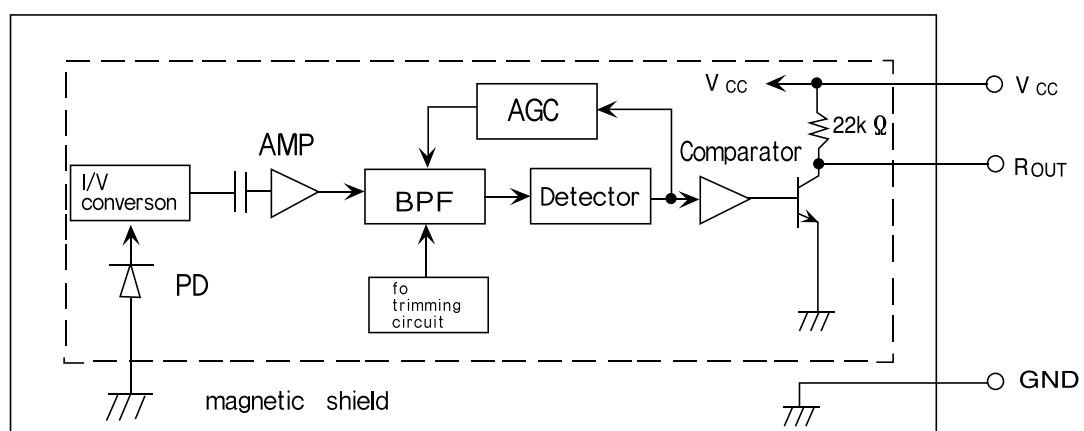
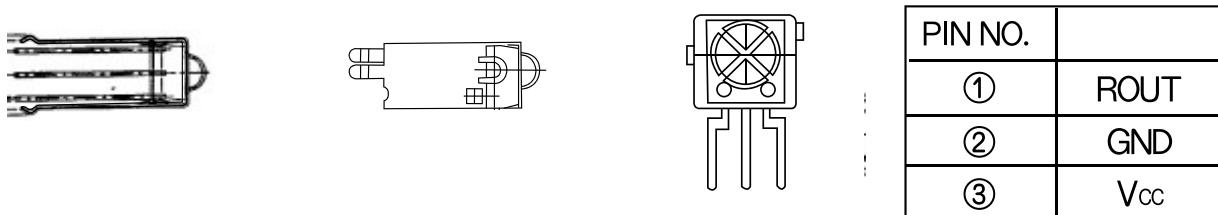
IC100~IC111.IC116.IC117.IC400.IC401.IC402.IC403.IC404
 IC1.IC4.IC7.IC8.IC9.IC11.IC12.IC13.IC15.IC16.IC17.IC20
 IC21.IC23.IC24.IC25.IC26.IC27
 IC22
 IC901~904



30.KIA78R08API
 DSP PART IC601

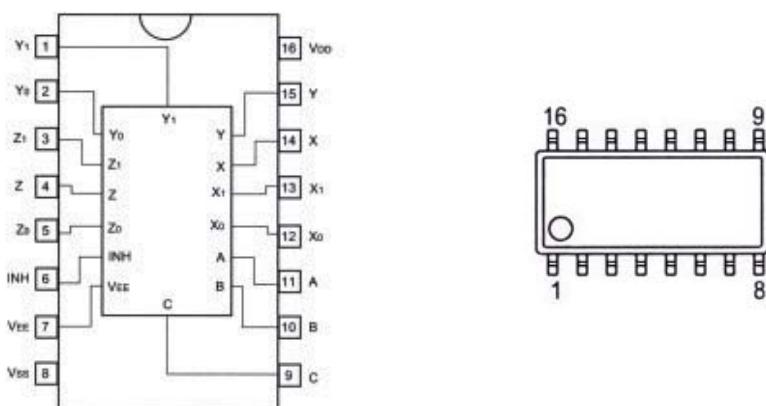


31.RPM6938-RSIP-A3
 FRONT PART RM100



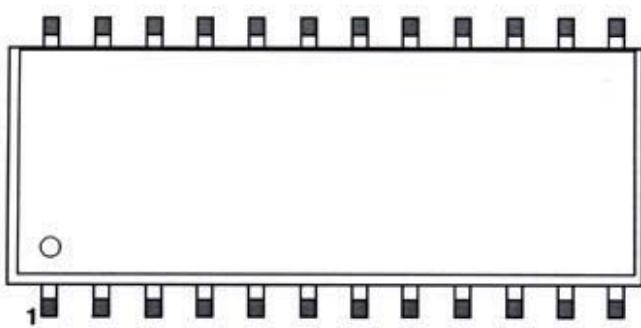
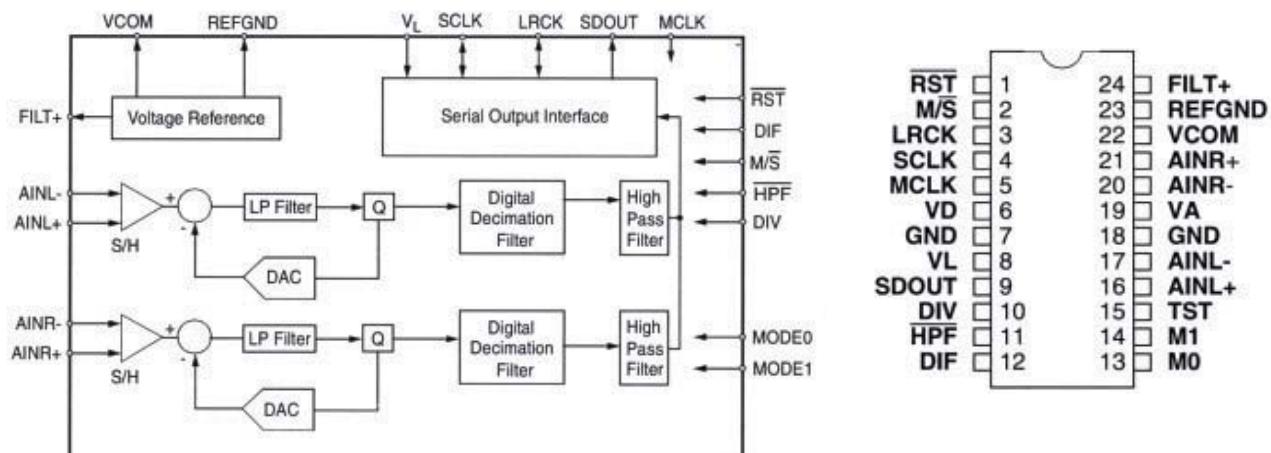
32.BU4053BF
VIDEO PART

IC16



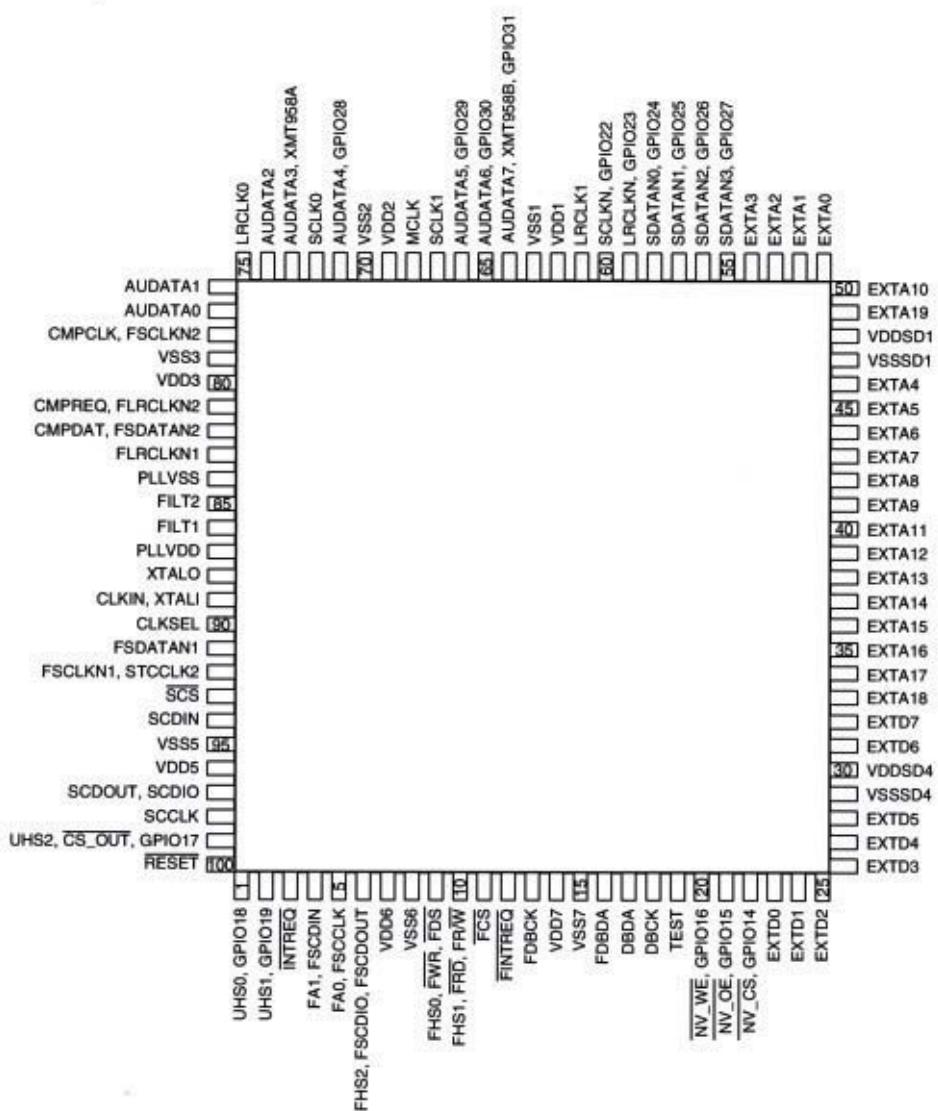
33.CS5361
DSP PART

IC112.IC113.IC114.IC115



CS49400
DSP PART

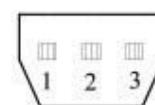
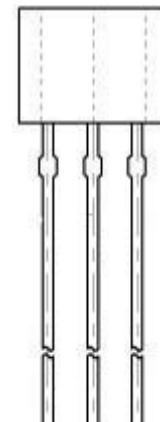
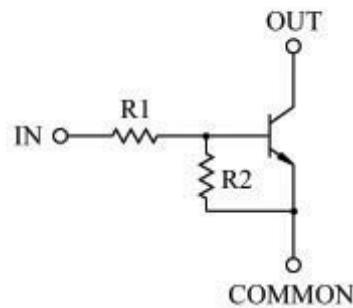
IC800



TRANSISTOR BLOCK

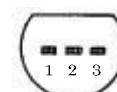
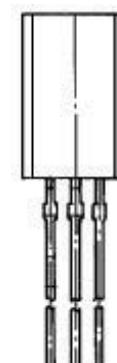
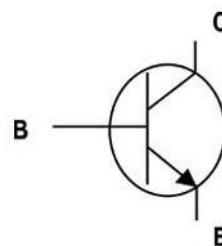
1.KRC107M
 MAIN PART Q443
 VIDEO PART Q400.501.502
 DTC114YS
 VIDEO PART Q107.110

EQUIVALENT CIRCUIT



1. Emitter
 2. Collector
 3. Base

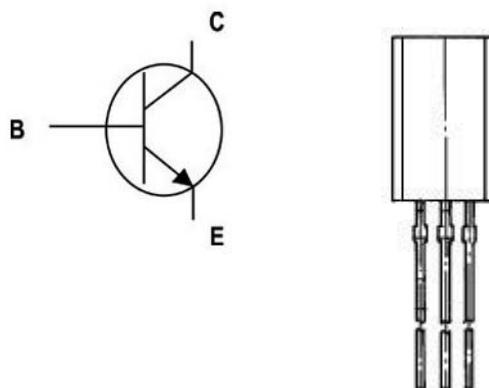
2.2SA1145Y
 MAIN PART Q309.310.411.412
 SURROUND PART Q305.405.505



1. Emitter
 2. Collector
 3. Base

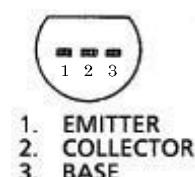
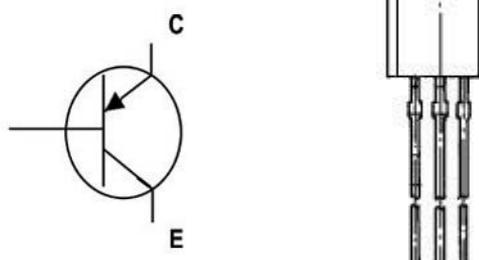
3.KTD1302
MAIN PART Q602

KTC3200BL
MAIN PART Q301~306.313.314.337.338.401.402.403.404.405.406.409.415.416.425
SURROUND PART Q301.302.307.320.401.402.403.407.420.501.502.503.507.520
KTC3198BL
MAIN PART Q307.308.407.408.426.441.606.608
SURROUND PART Q304.404.504
MPSA06N
SUPPLY PART Q101.102
DSP PART Q611
2SC1740S
VIDEO PART Q100.112.114



4.KTA1266
MAIN PART Q605.607

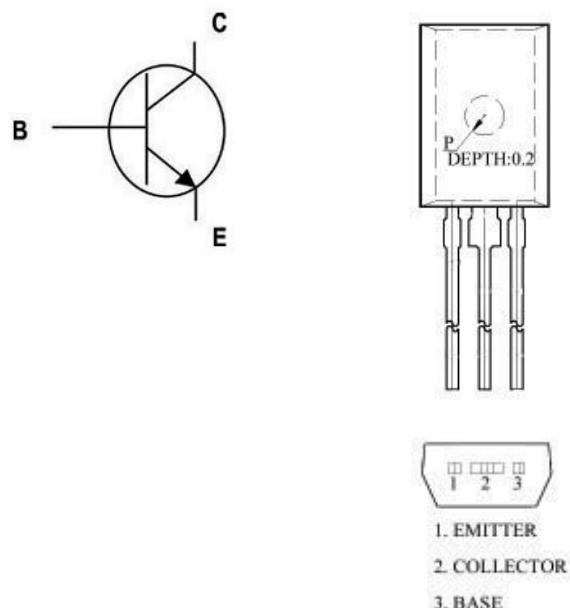
KTA1268BL
MAIN PART Q311.312.410.413.414
SURROUND PART Q306.406.506.601
2SA933A
VIDEO PART Q101.104.111
MPSA56Y
FRONT PART Q100.101



1. Emitter
2. Collector
3. Base

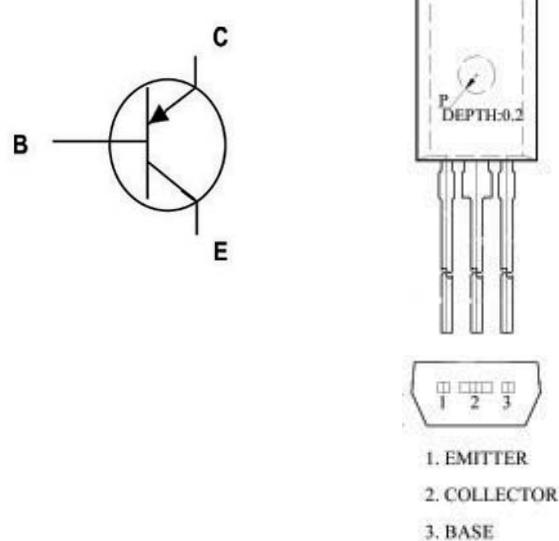
5.KTC3206
MAIN PART
SURROUND PART

Q317.318.321.322.323.324.419.420.423.424.429.430
Q309.312.313.409.412.413.509.512.513



6.KTA1024
MAIN PART
SURROUND PART

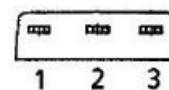
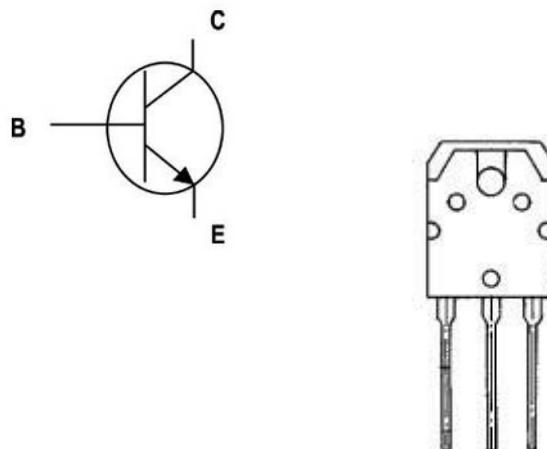
Q315.316.319.320.327.328.417.418.421.422.431.432.442
Q308.311.315.408.411.415.508.511.515



7.2SC5358

MAIN PART Q333.34.437.438

SURROUND PART Q318.418.518

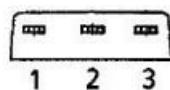
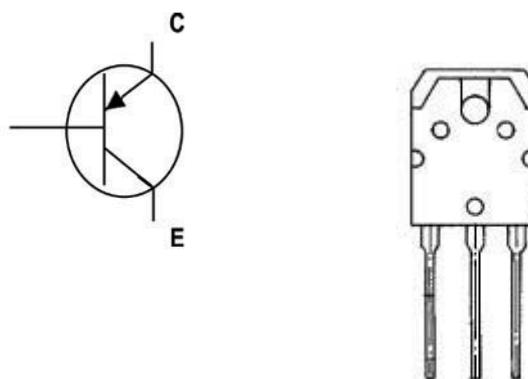


1. BASE
2. COLLECTOR (HEAT SINK)
3. Emitter

8.2SA1986

MAIN PART Q335.336.439.440

SURROUND PART Q319.419.519



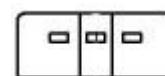
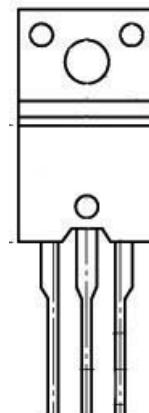
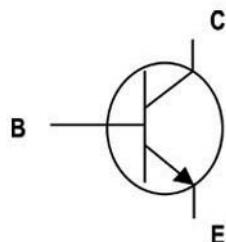
1. BASE
2. COLLECTOR (HEAT SINK)
3. Emitter

9.2SC4883

MAIN PART Q331.332.435.436

SURROUND PART

Q317.417.517



1 2 3

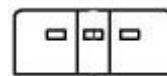
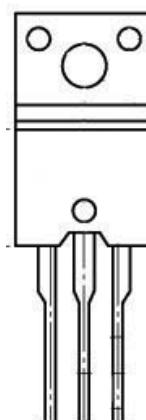
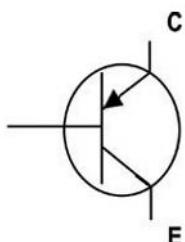
1. BASE
2. COLLECTOR (HEAT SINK)
3. Emitter

10.2SA1859

MAIN PART Q329.330.433.434

SURROUND PART

Q316.416.516



1 2 3

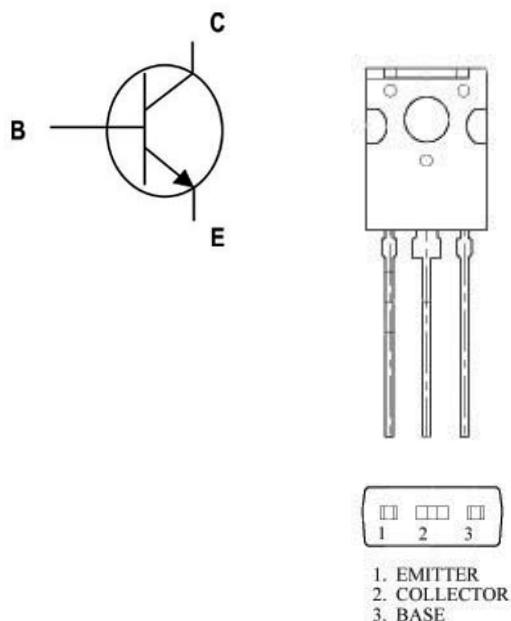
1. BASE
2. COLLECTOR (HEAT SINK)
3. Emitter

11.2SC4137

MAIN PART Q701.702.703.704

SURROUND PART

Q314.414.514

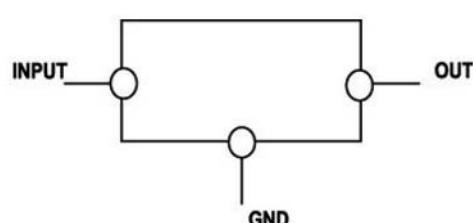
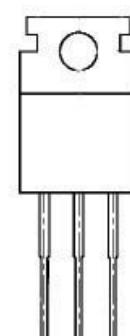


12.KIA7815
 MAIN PART KIA7812
 MAIN PART KIA7824
 MAIN PART KIA806
 VIDEO PART

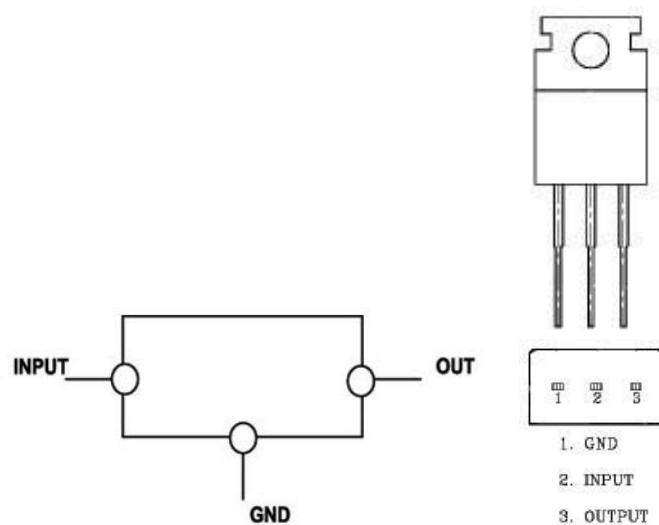
IC51
 IC59
 IC54
 IC18

KIA7805
 MAIN PART
 SUPPLY PART

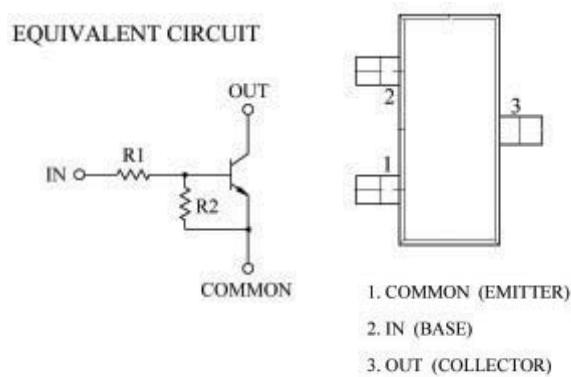
IC55
 IC11



13.KIA7915
 MAIN PART IC52
 KIA7905
 MAIN PART IC56



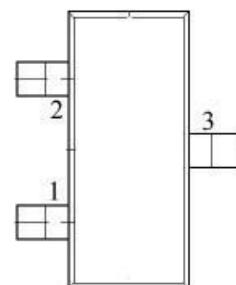
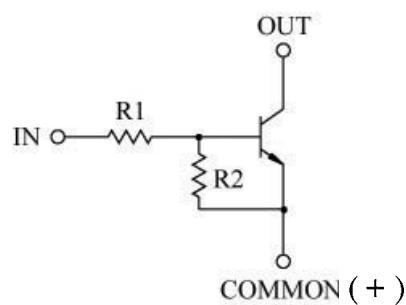
14.DTC114Y
 DSP PART Q600.601.604.605.606.607.608.609.612.613.700
 FRONT PART Q102.103.801.802.803.804.805
 PROCESSOR PART Q54
 VIDEO PART Q105.106.113



15.DTA114Y

DSP PART Q402.403
 PROCESSOR PART Q20.3.13.14.17.23.25.32.34.35.37.41.43.50.52
 VIDEO PART Q102.103

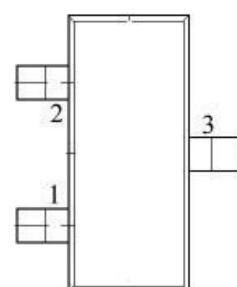
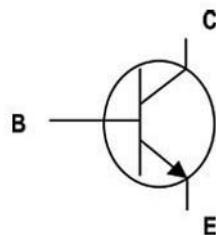
EQUIVALENT CIRCUIT



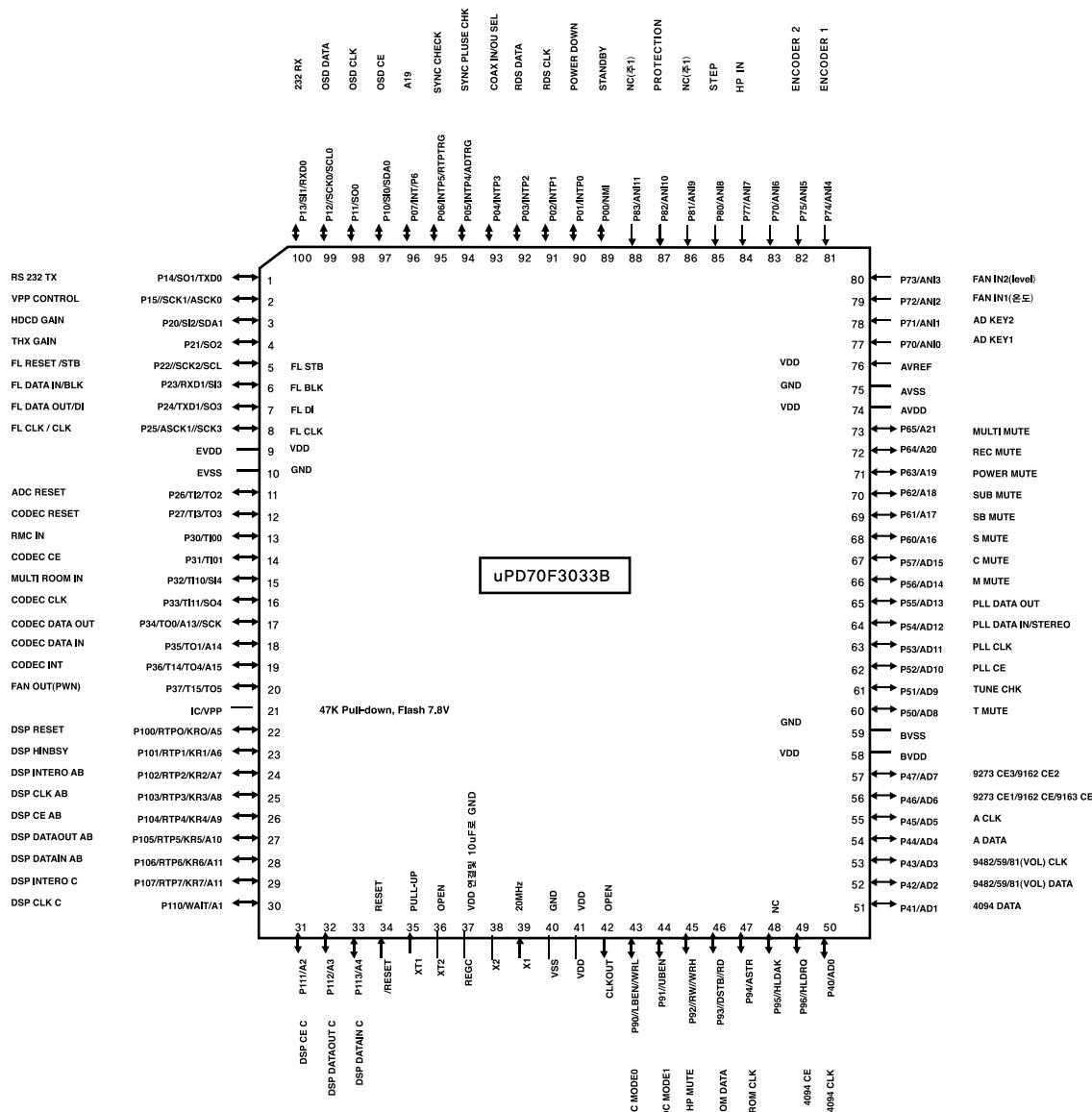
1. COMMON (EMITTER)
2. IN (BASE)
3. OUT (COLLECTOR)

16.KTD1304N

DSP PART Q400.401
 FRONT PART Q800
 PROCESSOR PART Q4.7.8.9.10.11.12.15.16.51.53.58.59

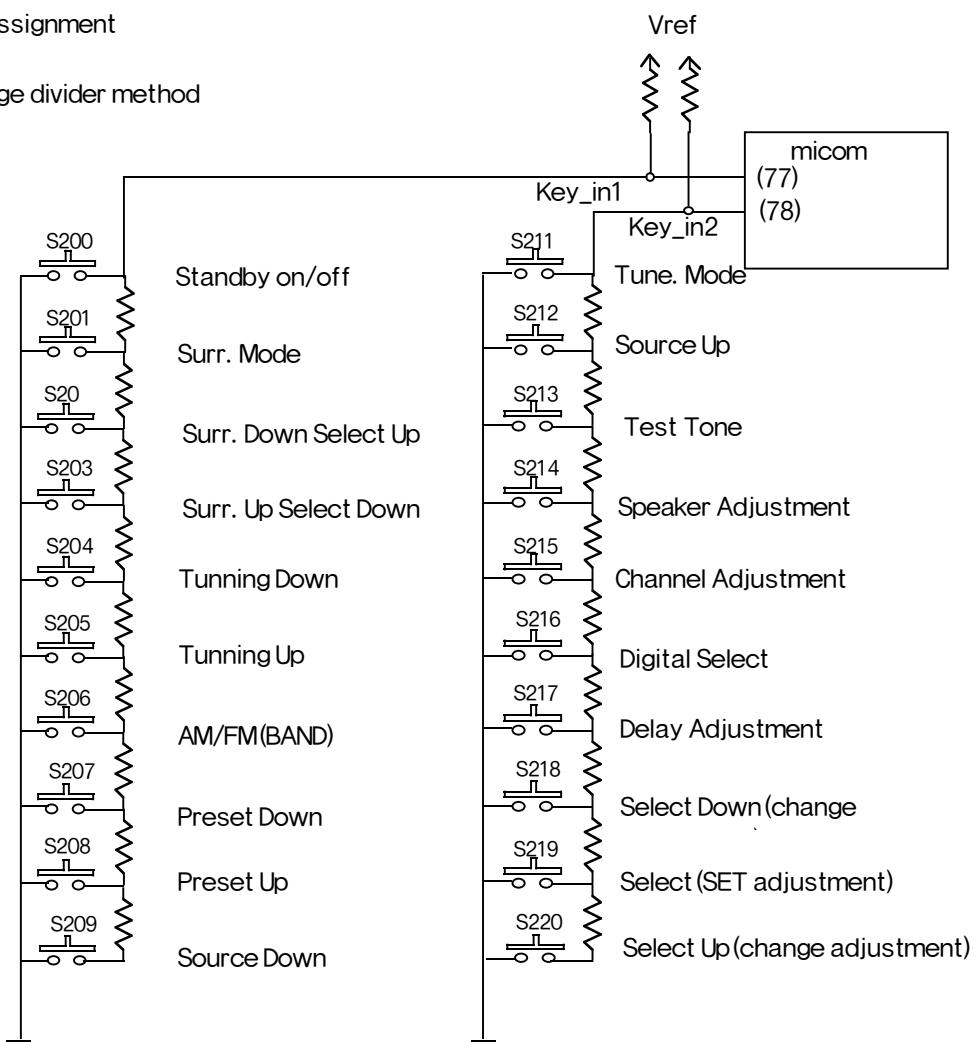


1. EMITTER
2. BASE
3. COLLECTOR

Upd70F3033BGF-3BA PORT DEFINE FOR AVR630


1. Key assignment

- voltage divider method



2. Define Option

1) TUNER OPTION:

HIGH(PULL UP - R168(10K)) : RDS
 LOW(PULL DPWN - R654(10K)) : NO RDS

2) NTSC/PAL:

STANDBY OFF--> SELECT UP(FOR 2 SEC) --> SELECT NTSC/PAL BY TOGGLE SELECT UP KEY

---> SET NTSC OR PAL BY SET KEY

uPD70F3033B (V850/SB1)
PORT ASSIGNMENT

AVR540/340

PORT ASSIGNMENT

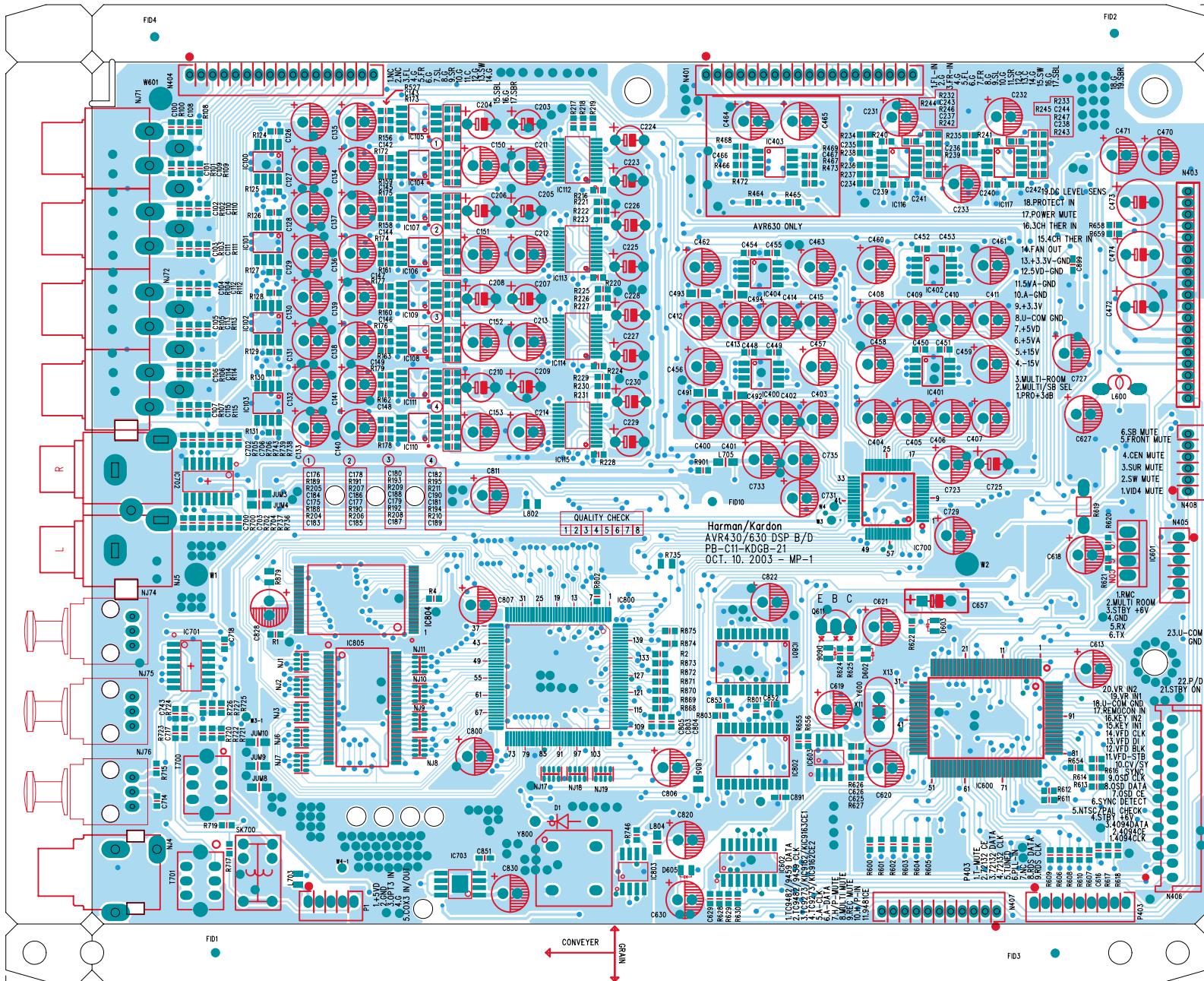
| PIN | DESCRIPTION | RECEIVER NAME | IN/OUT | FUNCTION |
|-----|----------------|-------------------------|---------|--|
| 1 | P14/SO1/TXD0 | RS-232 TX | TX | CPU FLASH UPGRADE UART TX PORT |
| 2 | P15/SCK1/ASCK0 | VPP_CONTROL | OUT | Flash Upgrade VPP Control Pin |
| 3 | P20/SI2/SDA1 | HDCD GAIN | OUT | HDCD GAIN (DSP) |
| 4 | P21/SO2 | THX GAIN | OUT | THX GAIN (DSP) |
| 5 | P22/SCK2/SCL1 | FIP RST / FL_STB | OUT | FIP DRIVER IC RESET / FL_STROBE |
| 6 | P23/RXD1/SI3 | FIP SI / FL_BLK | SI | FIP DRIVER IC DATA IN / FL_BLANK |
| 7 | P24/TXD1/SO3 | FIP SO / FL_DI | SO | FIP DRIVER IC DATA OUT / FL_DI |
| 8 | P25/ASCK1/SCK3 | FIP CLK / FL_CLK | SCK | FIP DRIVER IC CLOCK OUT (NEC CPU MASTER) / FL_CLK |
| 9 | EVDD | EVDD | VDD | VDD |
| 10 | EVSS | EVSS | VDD | GND |
| 11 | P26/TI2/T02 | ADC RESET | OUT | ADC RESET (DSP) |
| 12 | P27/TI3/T03 | CODEC_RESET | OUT | CODEC RESET (DSP) |
| 13 | P30/TI00 | RMC_IN | CAPTURE | REMOCON IN |
| 14 | P31/TI01 | CODEC_CE | OUT | CODEC CHIP ENABLE (DSP) |
| 15 | P32/T110/S14 | RMC_MULTI | CAPTURE | MULTI ROOM REMOCON |
| 16 | P33/T111/SO4 | CODEC CLK | OUT | CODEC CLK(DSP) |
| 17 | P34/T00/SCK4 | CODEC_DATA_OUT | OUT | CODEC DATA_OUT (DSP) |
| 18 | P35/T01 | CODEC_DATA_IN | IN | CODEC DSP_IN(DSP) |
| 19 | P36/TI4/T04 | CODEC_INT | IN | CODEC INT (DSP) |
| 20 | P37/TI5/T05 | FAN OUT | OUT | FAN OUT CONTROL (PWM) |
| 21 | IC/VPP | VPP | IN | 47K Pull_Down, FLASH WRITE 7.8V |
| 22 | P100/RTP0/KR0 | DSP_RESET | OUT | CS49400 RESET (DSP) |
| 23 | P101/RTP1/KR1 | DSP_HINBSY | IN | CS49400 HINBSY (DSP) |
| 24 | P102/RTP2/KR2 | DSP_INTERQ_AB | IN | CS49400 INTERQ_AB(DSP) |
| 25 | P103/RTP3/KR3 | DSP_CLK_AB | OUT | CS49400 CLK AB |
| 26 | P104/RTP4/KR4 | DSP_CE_AB | OUT | CS49400 CE AB |
| 27 | P105/RTP5/KR5 | DSP_DATA_OUT_AB | OUT | CS49400 DATA OUT (DSP) |
| 28 | P106/RTP6/KR6 | DSP_DATA_IN_AB | IN/OUT | CS49400 DATA IN (DSP) |
| 29 | P107/RTP7/KR7 | DSP_INTERQ_C | IN | CS49400 INTERQ C(DSP) |
| 30 | P110/WAIT | DSP_CLK_C | OUT | CS49400 CLK C(DSP) |
| 31 | P111 | DSP_CE_C | OUT | CS49400 CE C (DSP) |
| 32 | P112 | DSP_DATA_OUT_C | OUT | CS49400 DATA OUT C(DSP) |
| 33 | P113 | DSP_DATA_IN_C | IN/OUT | CS49400 DATA IN C (DSP) |
| 34 | /RESET | RESET | IN | LOW ACTIVE |
| 35 | XT1 | XT1 | IN | Pull_Down |
| 36 | XT2 | XT2 | OUT | OPEN |
| 37 | REGC | REGC | VDD | VDD |
| 38 | X2 | Fx_OUT | OUT | 20.00MHz RESONATOR |
| 39 | X1 | Fx_IN | IN | 20.00MHz RESONATOR |
| 40 | VSS | VSS | VDD | GND |
| 41 | VDD | VDD | VDD | 5V |
| 42 | CLKOUT | CLKOUT | OUT | OPEN (STOP MODE: LOW) |
| 43 | P90/LBEN/WRL | ADC MODE 0 | OUT | ADC MODE 0 (DSP) |
| 44 | P91/UBEN | ADC MODE 1 | OUT | ADC MODE 1 (DSP) |
| 45 | P92/RW/WRH | HP MUTE | OUT | HEADPHONE MUTE |
| 46 | P93/DSTB/RD | EEPROM DATA | OUT | EEPROM DATA |
| 47 | P94/ASTB | EEPROM CLK | OUT | EEPROM CLK |
| 48 | P95/HLDACK | VOL_IC_CE | OUT | TC9481/TC9482/TC9459_CE |
| 49 | P96/HLDREQ | 4094 CE | OUT | 4094 CHIP ENABLE |

uPD70F3033B (V850/SB1)
PORT ASSIGNMENT

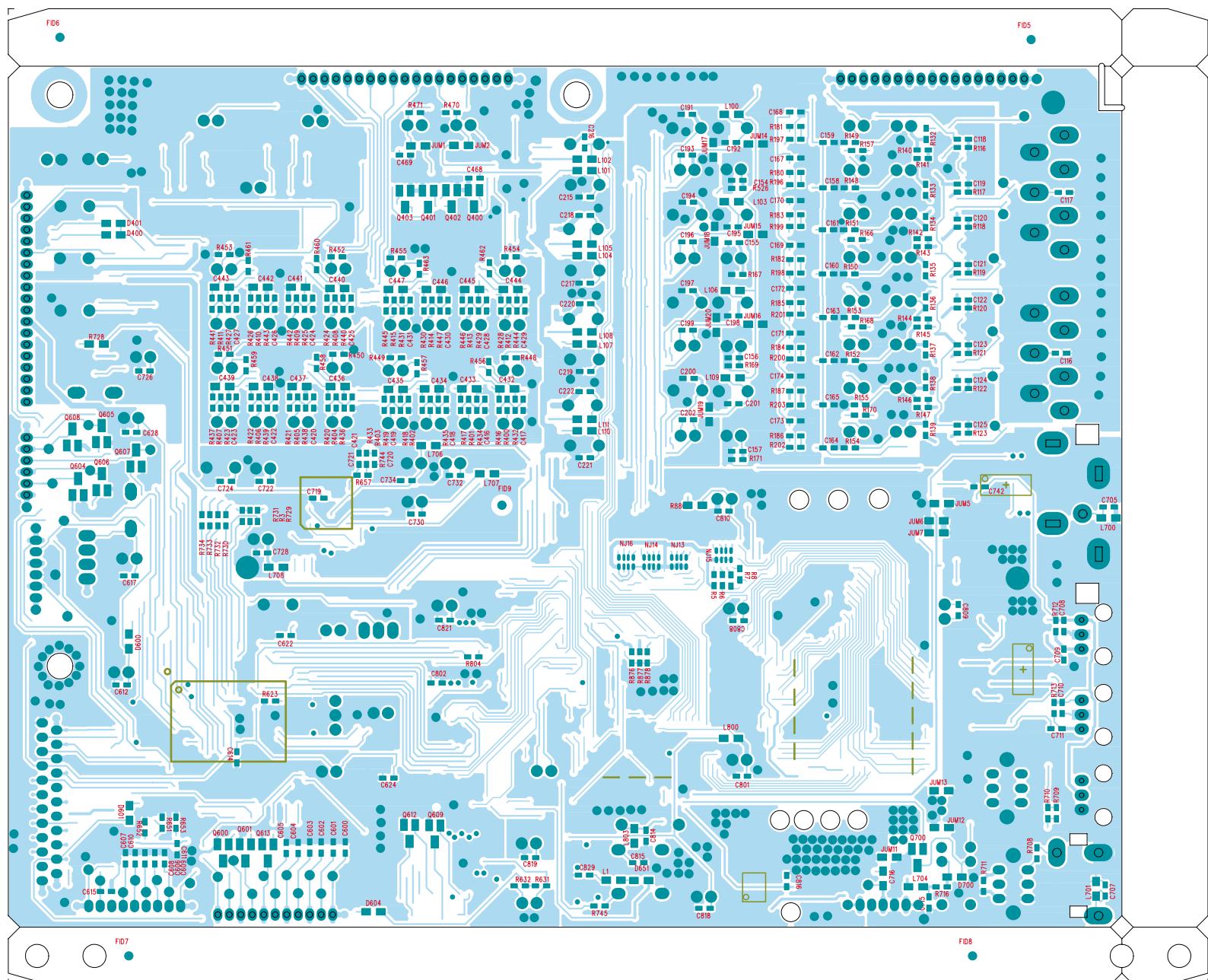
AVR540/340

| | | | | |
|-----|------------------|-------------------------|--------|--|
| 50 | P40 | 4094 CLK | OUT | 4094 CLK |
| PIN | DESCRIPTION | RECEIVER NAME | IN/OUT | FUNCTION |
| 51 | P41 | 4094 DATA | OUT | 4094 DATA |
| 52 | P42 | 9482/59/ 81 DATA | OUT | 9482/59/ 81 VOL IC DATA |
| 53 | P43 | 9482/59/ 81 CLK | OUT | 9482/59/ 81 VOL IC CLK |
| 54 | P44 | A DATA | OUT | 9273_1, 9273_3, 9162, 9162_2, 9163 DATA |
| 55 | P45 | A CLK | OUT | 9273_1, 9273_3, 9162, 9162_2, 9163 CLK |
| 56 | P46 | 9273_CE1 | OUT | 9273_1, 9162, 9163 CHIP ENABLE |
| 57 | P47 | 9273_CE3 | OUT | 9273_3, 9162_2 CHIP ENABLE |
| 58 | BVDD | BVDD | VDD | VDD |
| 59 | BVSS | BVSS | VDD | GND |
| 60 | P50 | T_MUTE | OUT | TUNER MUTE OUT |
| 61 | P51 | TUNED | IN | TUNED CHECK IN |
| 62 | P52 | T_CE | OUT | TUNER PLL IC(LC72131) CHIP ENABLE |
| 63 | P53 | T_CLOCK | OUT | TUNER PLL IC(LC72131) CLOCK |
| 64 | P54 | T_DATA IN/STEREO | IN | TUNER PLL IC(LC72131) DATA IN / STEREO CHECK |
| 65 | P55 | T_DATA OUT | OUT | TUNER PLL IC(LC72131) DATA OUT |
| 66 | P56 | MMUTE | OUT | FRONT SPEAKER MUTE |
| 67 | P57 | CMUTE | OUT | CENTER SPEAKER MUTE |
| 68 | P60 | SMUTE | OUT | SURROUND SPEAKER MUTE |
| 69 | P61 | SBMUTE | OUT | SURR BACK SPEAKER MUTE |
| 70 | P62 | SUBMUTE | OUT | SUB WOOFER MUTE |
| 71 | P63 | PMUTE | OUT | POWER MUTE |
| 72 | P64 | REOMUTE | OUT | REC MUTE |
| 73 | P65 | MULTI MUTE | OUT | MULTI ROOM MUTE |
| 74 | AVDD | AVDD | VDD | VDD |
| 75 | AVSS | AVSS | VDD | GND |
| 76 | AVREF | AVREF | VDD | VDD(AD KEY PULL UP VDD) |
| 77 | P70/ANI0 | AD KEY1 | ADIN | A/D KEY INPUT1 |
| 78 | P71/ANI1 | AD KEY2 | ADIN | A/D KEY INPUT2 |
| 79 | P72/ANI2 | FAN IN1 | ADIN | TEMPERATURE SENSOR INPUT |
| 80 | P73/ANI3 | FAN IN2 | ADIN | LEVEL SENSOR INPUT |
| 81 | P74/ANI4 | ENCODE1 | IN | VOLUME ENCODER INPUT 1 |
| 82 | P75/ANI5 | ENCODE2 | IN | VOLUME ENCODER INPUT 2 |
| 83 | P76/ANI6 | yc/comp check | ADIN | Y/C, COMPO jack check in |
| 84 | P77/ANI7 | HP_IN | IN | HEADPHONE INPUT |
| 85 | P80/ANI8 | STEP | IN | TUNER FREQ OPTION |
| 86 | P81/ANI9 | NTSC/PAL SEL | IN | NC |
| 87 | P82/ANI10 | PROTECTION | IN | PROTECTION IN |
| 88 | P83/ANI11 | MODEL | IN | NC |
| 89 | P00/NMI | STANDBY | OUT | MAIN POWER ON/OFF |
| 90 | P01/INTP0 | POWER DOWN | INTP0 | POWER DOWN CHECK & WAKE UP : RISING EDGE |
| 91 | P02/INTP1 | RDS_CLOCK | INTP1 | RDS_CLOCK (INTERRUPT) : FALLING EDGE |
| 92 | P03/INTP2 | RDS_DATA | IN | RDS_DATA |
| 93 | P04/INTP3 | COAX_INOUT SEL | OUT | COAX IN/OUT SELECT |
| 94 | P05/INTP4/ADTRG | SYNC pulse check | IN | SYNC PLUSE CHECK(OSD IC 7PIN) |
| 95 | P06/INTP5/RTPTRG | SYNC CHECK | IN | SYNC CHECK(OSD IC 29PIN) |
| 96 | P07/INTP6 | A19 | OUT | A19 |
| 97 | P10/SI0 | OSD CE | OUT | OSD CHIP ENABLE |
| 98 | P11/SO0 | OSD CLK | OUT | OSD CLK |
| 99 | P12/SOK0 | OSD DATA | OUT | OSD DATA |
| 100 | P13/SI1/RXDO | RS-232 RX | RX | CPU FLASH UPGRADE UART RX PORT |

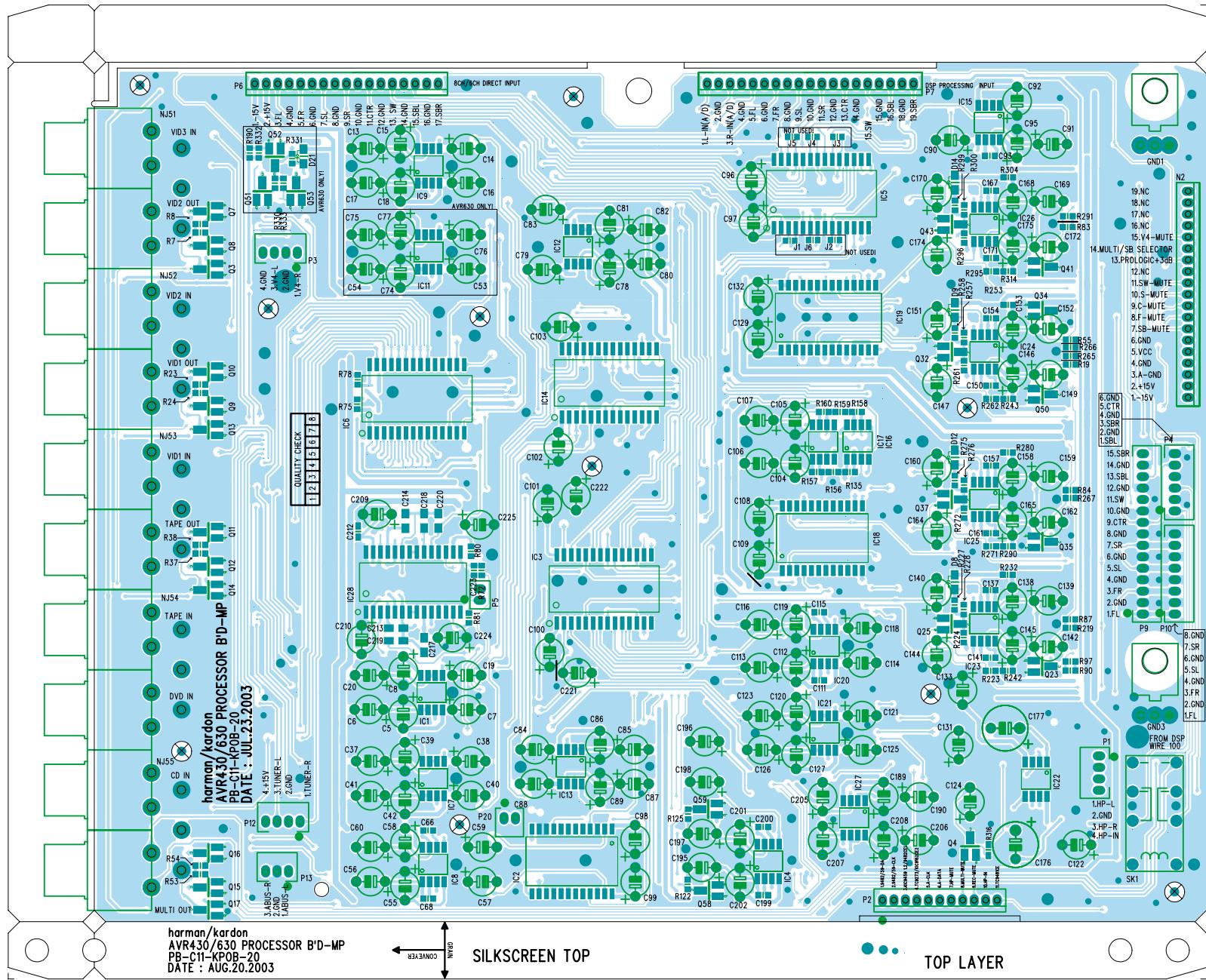
DSP BOARD (TOP VIEW)



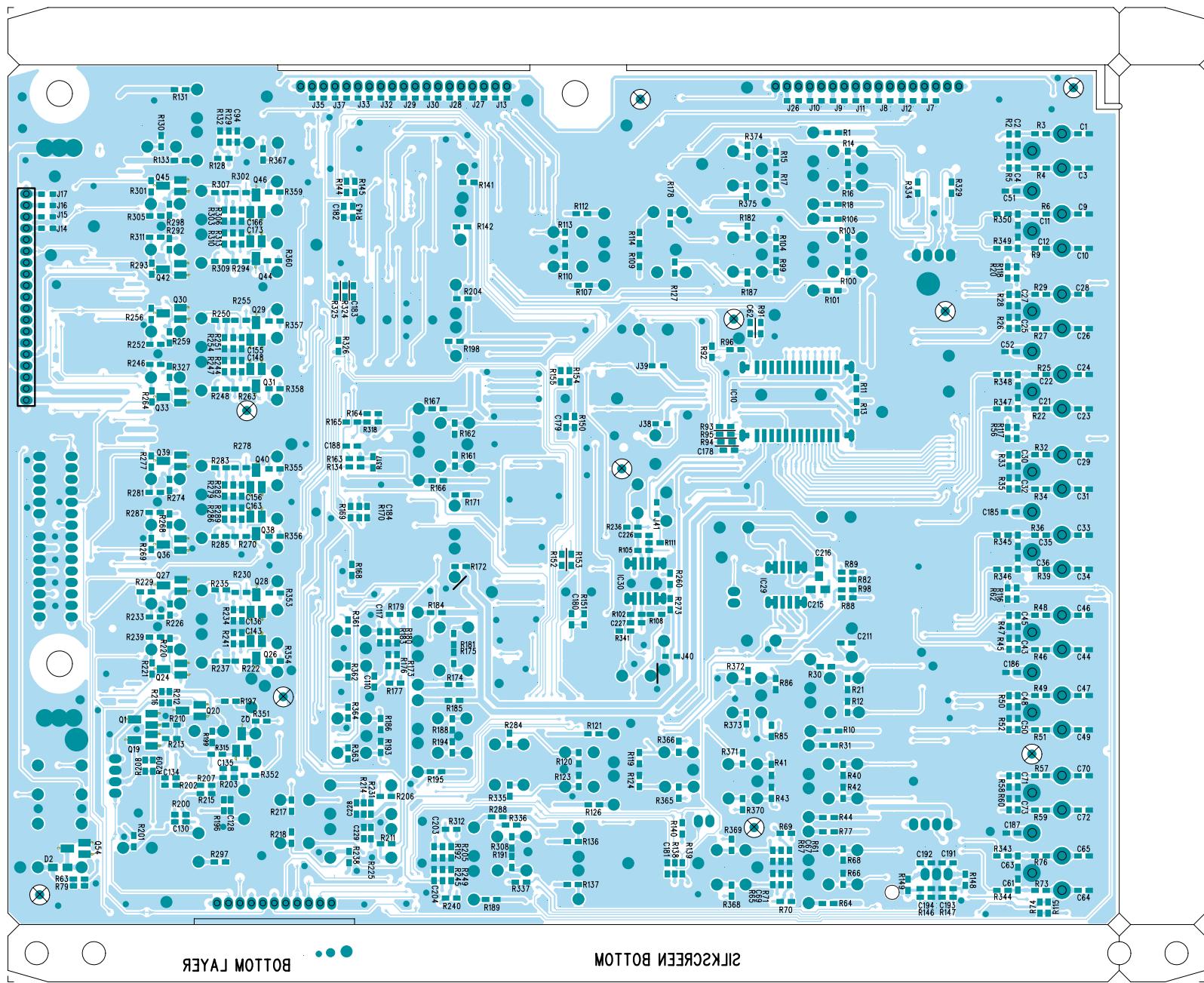
DSP BOARD (BOTTOM VIEW)



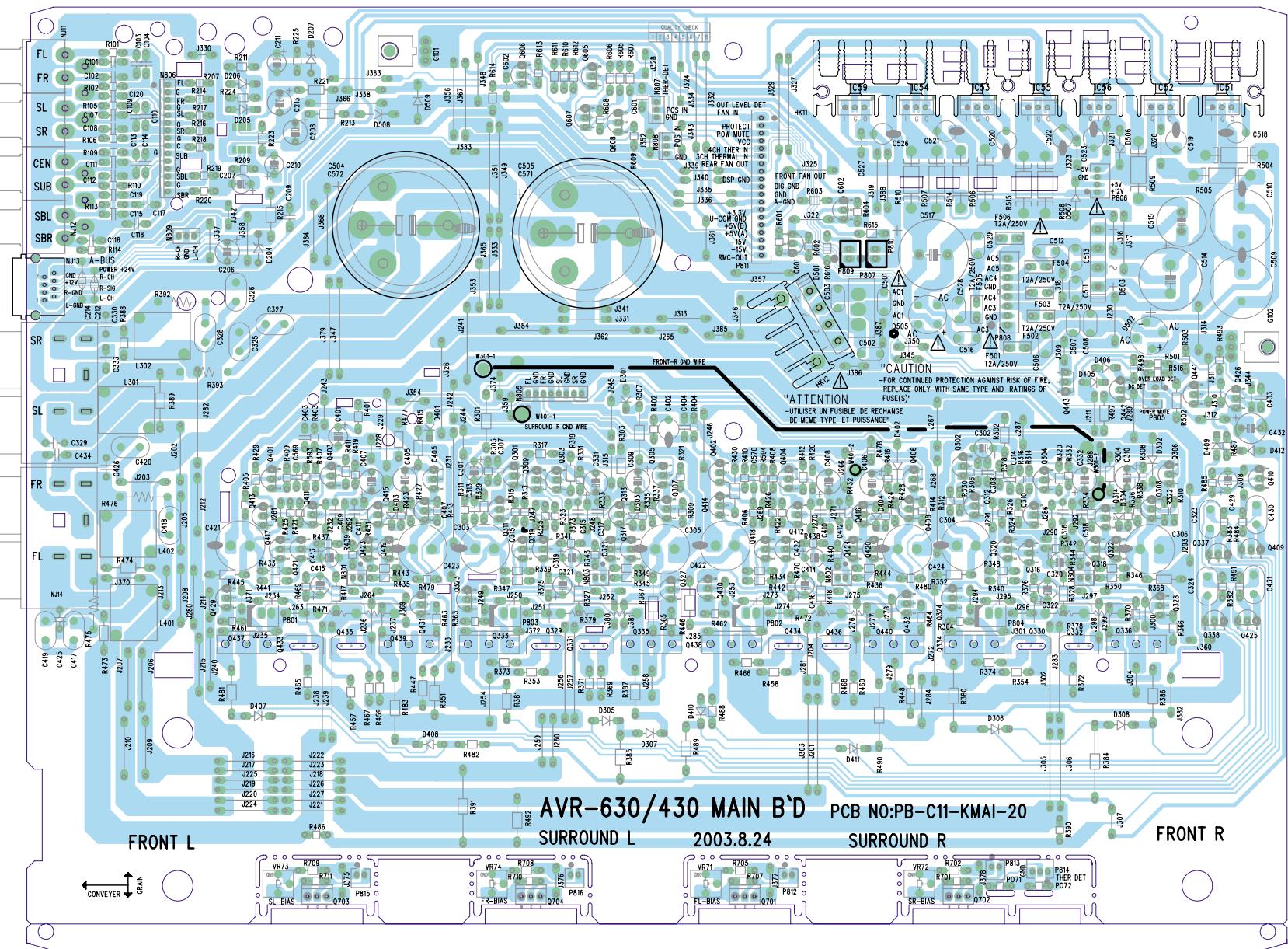
PROCESSOR BOARD (TOP VIEW)



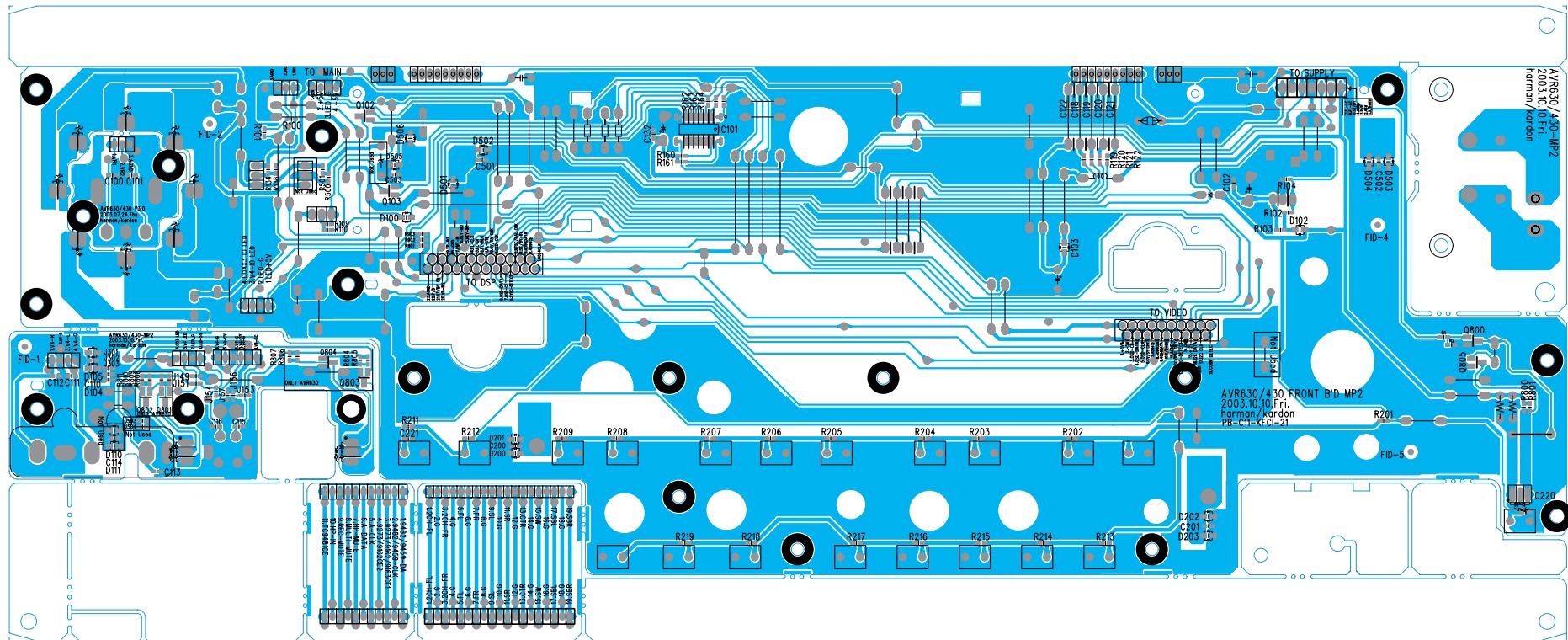
PROCESSOR BOARD (BOTTOM VIEW)



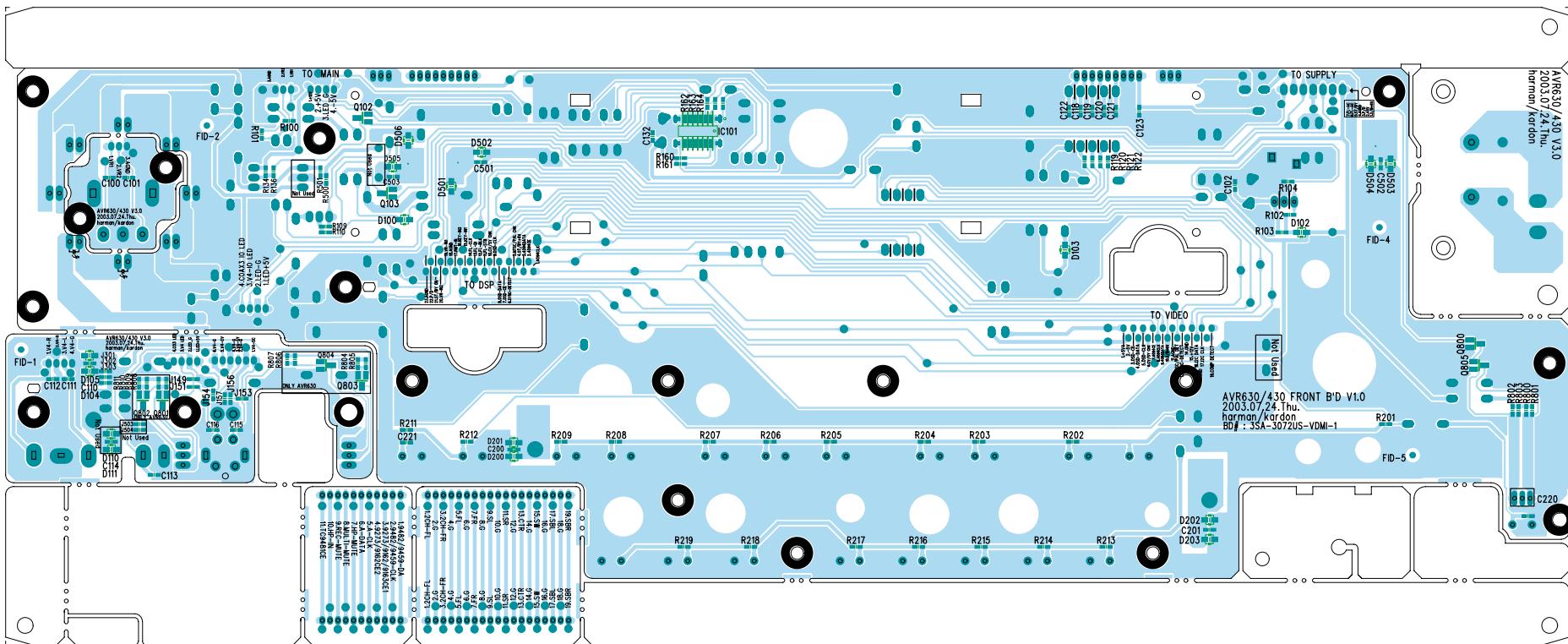
MAIN AMP BOARD



FRONT BOARD (BOTTOM VIEW)

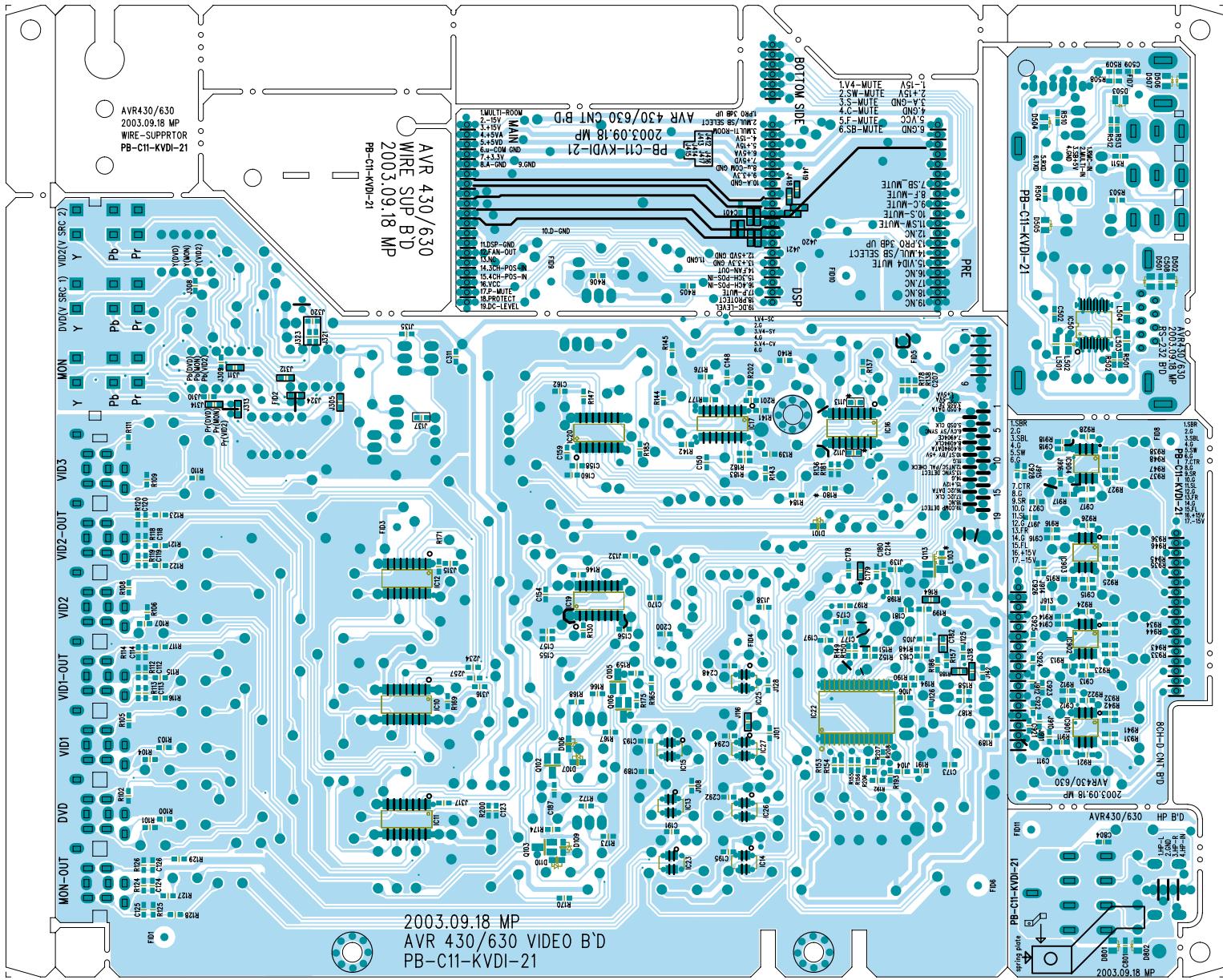


FRONT BOARD (TOP VIEW)

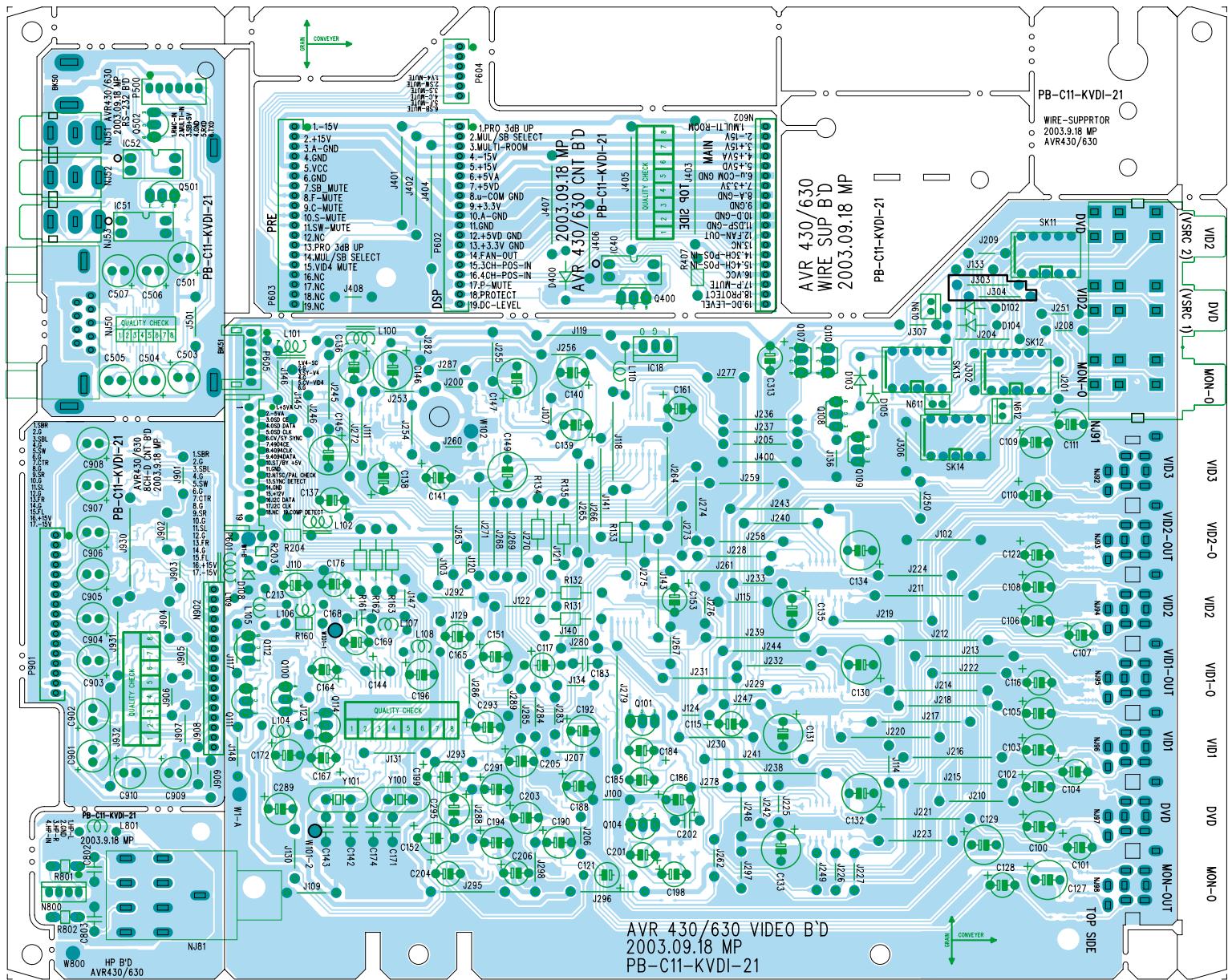


AVR630-FRONT FTMS-0723. - Wed Oct 08 19:00:25 2003

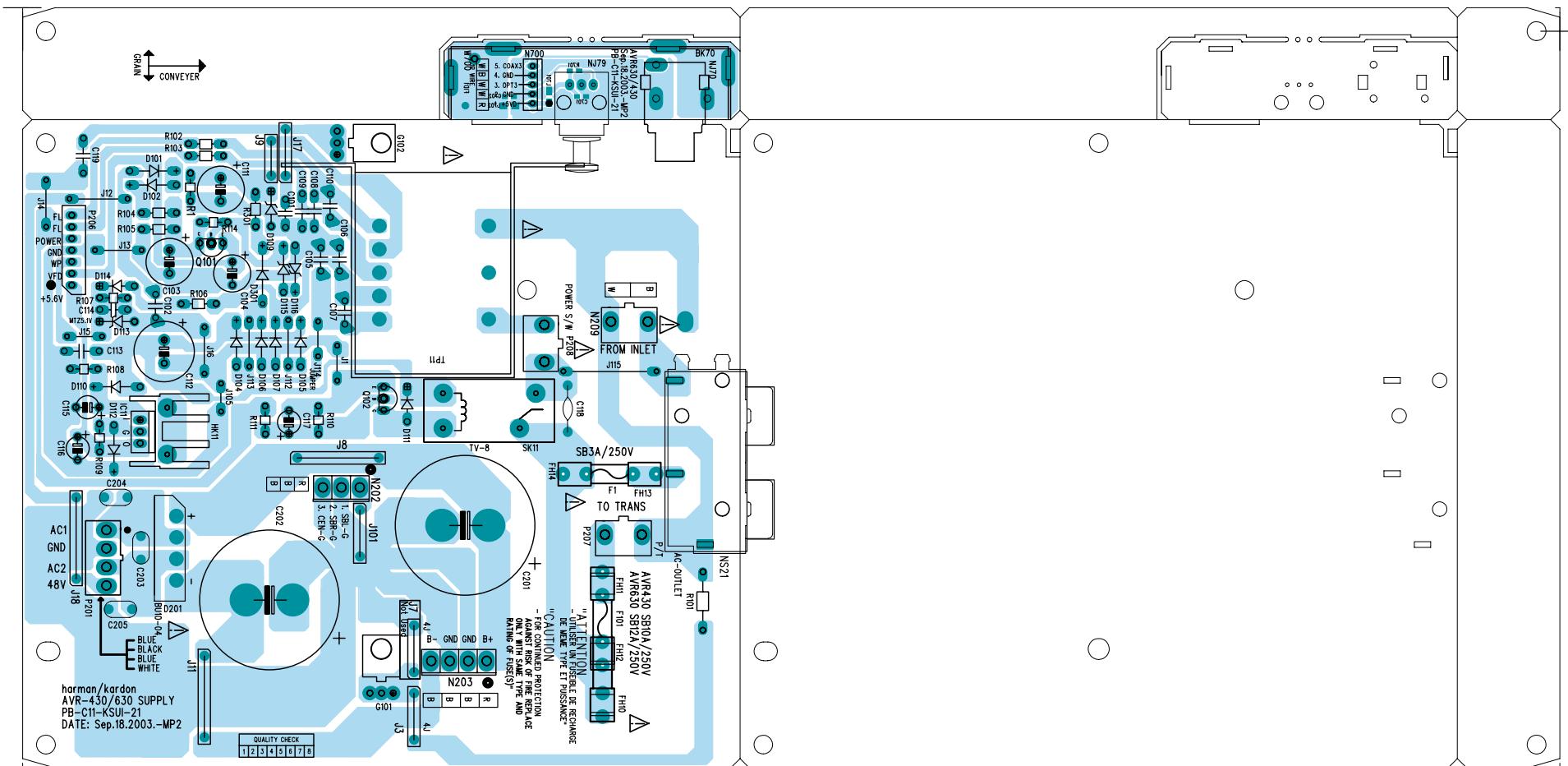
VIDEO BOARD (BOTTOM VIEW)



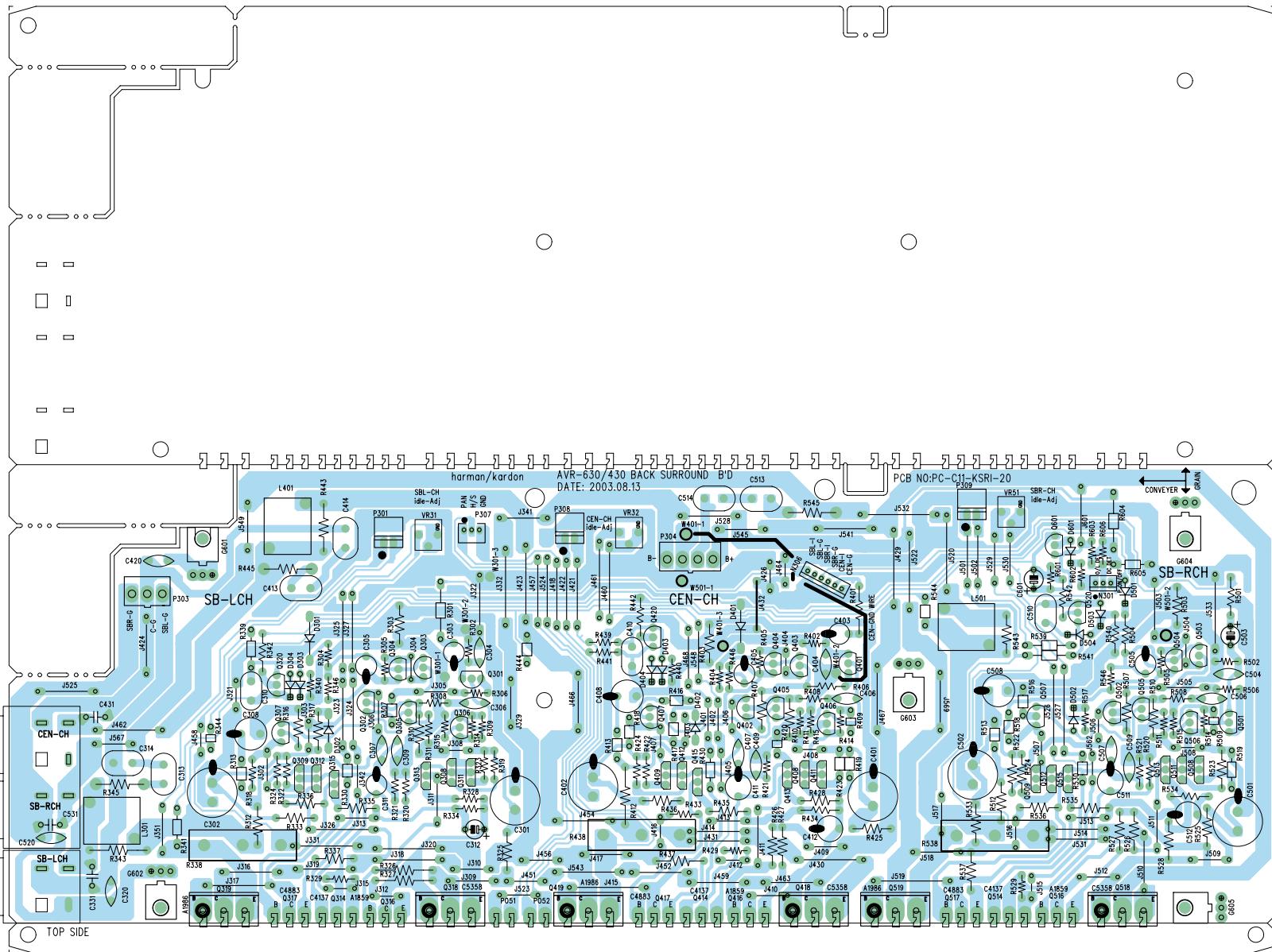
VIDEO BOARD (TOP VIEW)



SUPPLY BOARD



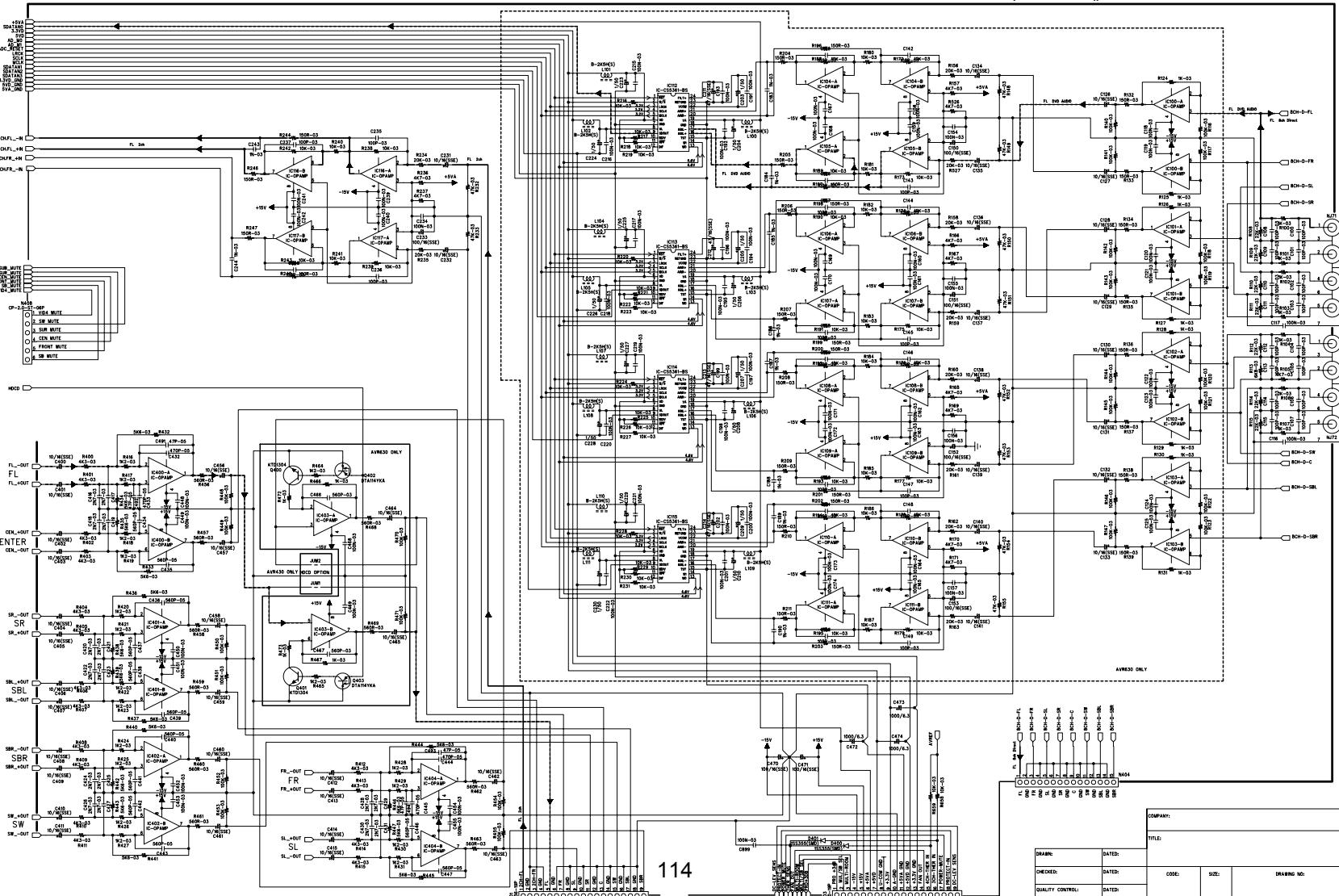
BACK SURROUND BOARD



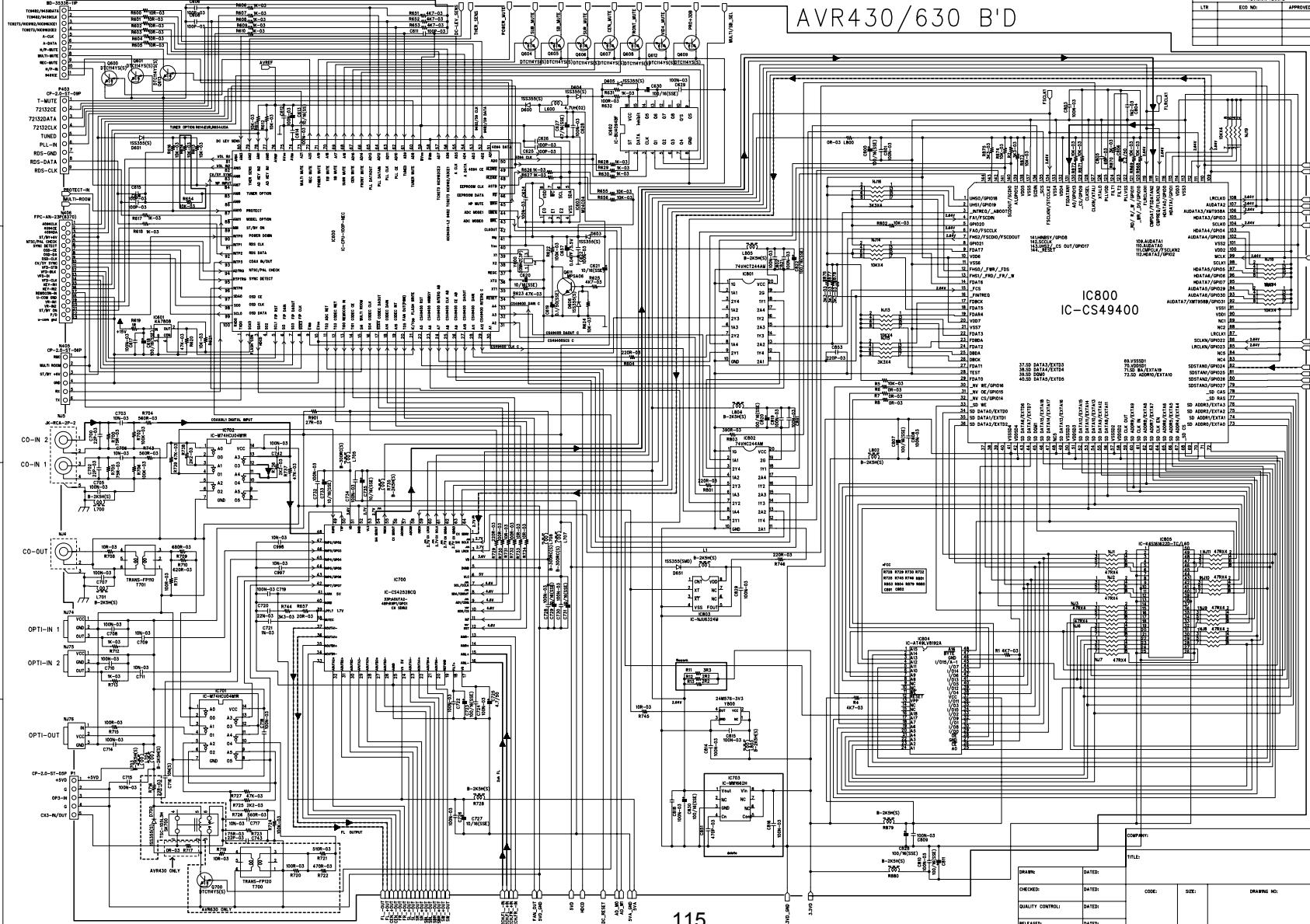
SCHEMATIC DIAGRAM

harman/kardon
AVR430/630DSP#2

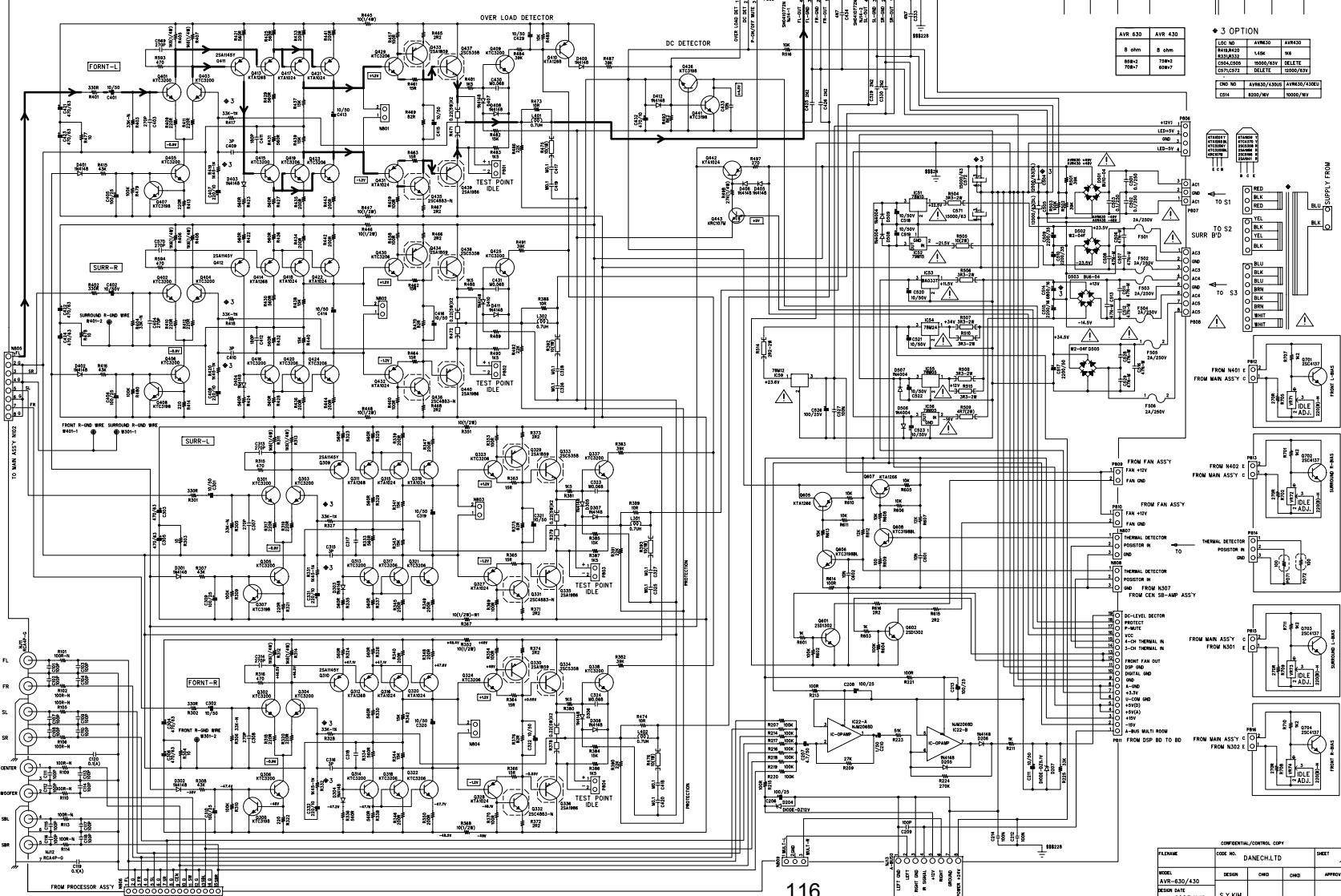
| REVISION RECORD | | | |
|-----------------|---------|----------|------|
| LTR | ECC NO. | APPROVED | DATE |



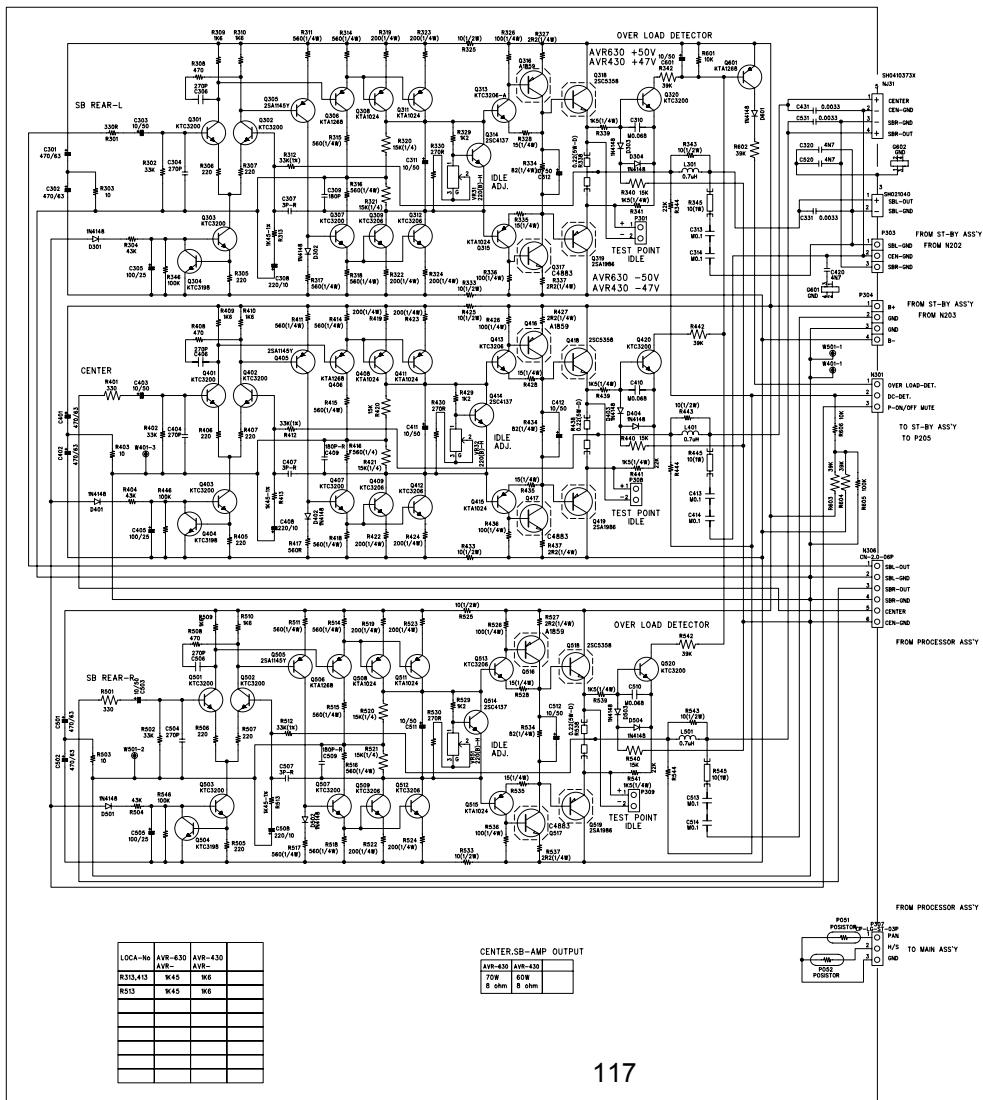
AVR430/630 B'D



AVR 630/430 MAIN AMP SCHEMATIC DIAGRAM



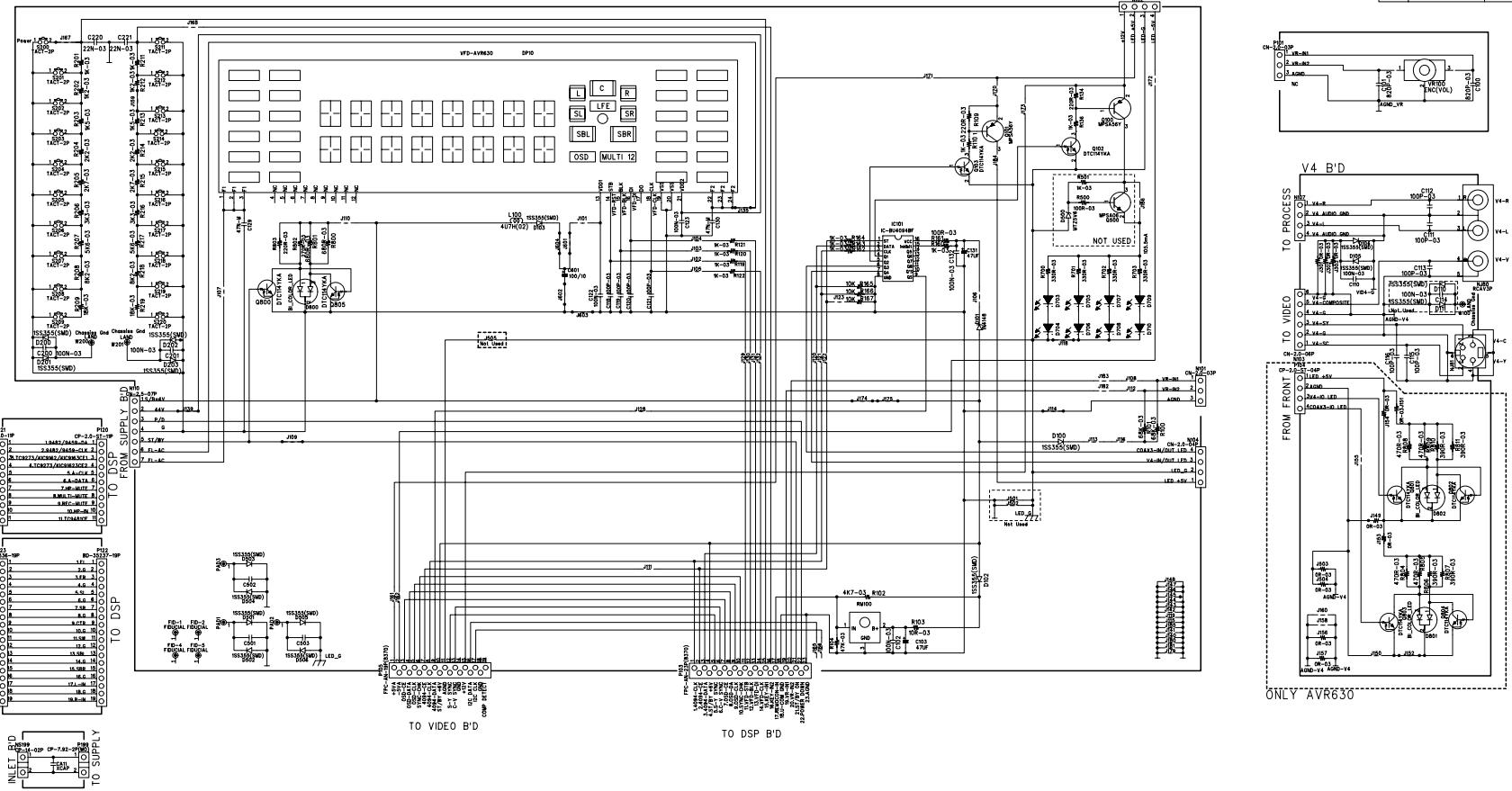
AVR 630/430 CENTER SB AMP SCHEMATIC DIAGRAM



SCHEMATIC DIAGRAM

harman/kardon
AVR430/630 FRONT

| REVISION RECORD | | | |
|-----------------|---------|-----------|-------|
| LTR | ECN NO. | APPROVED: | DATE: |



| | | | |
|------------------|-------------|--------------|-------------|
| DRAWN: | S.Y.KIM | DATER: | |
| CHECKED: | Mar.03.2003 | DATER: | |
| QUALITY CONTROL: | | DATER: | Apr.01.2003 |
| RELEASED: | | DATER: | |
| CODE: | SIZE: | DRAWING NO.: | |
| SCALE: | F1MS | REV.: | |

SHEET: 1 OF 1

SCHEMATIC DIAGRAM

harman/kardon
AVR430/630 VIDEO 1/2

| REVISION RECORD | | | |
|-----------------|---------|-----------|-------|
| LTR | ECO NO. | APPROVED: | DATE: |
| | | | |
| | | | |
| | | | |

D

C

B

A

D

MONITOR

DVD

VID1

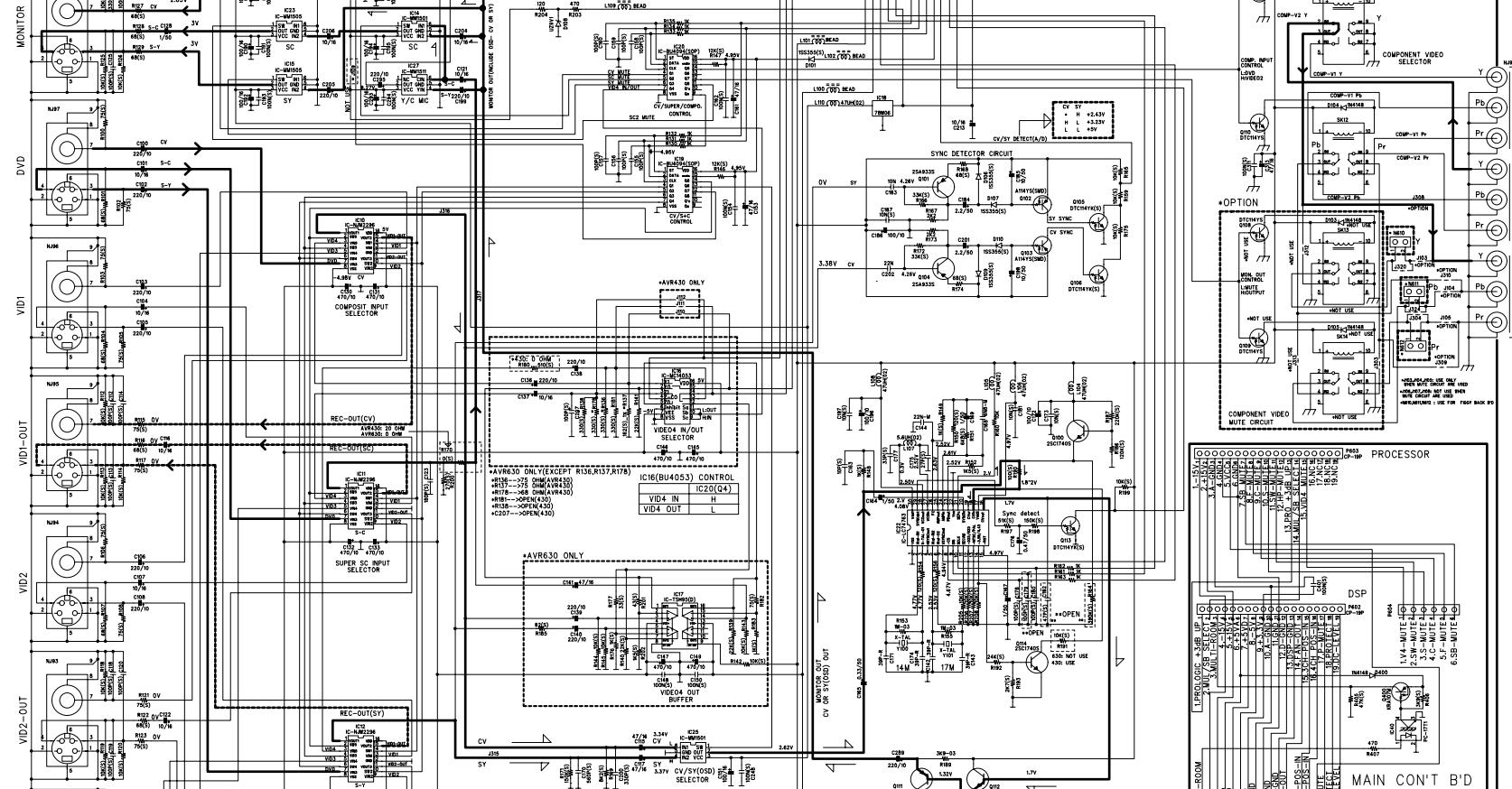
VID2-OUT

VID2

VID3

SWITCHING TABLE

| IC20(4094) CONTROL | IC19(4094) CONTROL |
|-------------------------|-----------------------|
| 01 SC OUT MUTE(ON) | 01 NC |
| 02 NC | 02 NM2296 SW1 |
| 03 NC | 03 NM2296 SW2 |
| 04 VID4 IN/OUT | 04 NM2296 SW3 |
| 05 COMP1/2 SELECT(Y/PB) | 05 NM2296 SW4 |
| 06 CV/Y/SY IN SELECT | 06 CV/Y/SY IN SELECT |
| 07 CV/Y/SY OUT SELECT | 07 CV/Y/SY OUT SELECT |
| 08 SC-OUT MUTE | 08 NC |



MONITOR OUT OPERATION - OSD FUNCTION

| OUTPUT | Q1(IC20) | Q2(IC20) | Q3(IC20) | Q6(C19) | Q8(IC20) | Q7(C19) | CV-DETECT | SY-DETECT | FULL OSD | CV/SY(D/A) |
|----------------|----------|------------|------------|---------|----------|---------|-----------|-----------|----------|------------|
| CV ONLY DETECT | ON(H) | NON OSD(L) | OFF(L) | ON(H) | OFF(L) | ON(H) | H | L | OFF | 3.3V |
| FULL OSD | ON(H) | ON(H) | ON(H) | * | ON(H) | ON(H) | * | * | ON | * |
| SY DETECT | SEMI OSD | ON(H) | NON OSD(L) | ON(H) | SY(H) | ON(H) | * | H | OFF | 2.5V |
| FULL OSD | ON(H) | ON(H) | ON(H) | * | ON(H) | ON(H) | * | * | ON | * |
| NONE SOURCE | SEMI OSD | ON(H) | ON(H) | ON(H) | ON(H) | ON(H) | L | L | OFF | 5V |
| FULL OSD | ON(H) | ON(H) | ON(H) | * | ON(H) | ON(H) | * | * | ON | * |
| MUTE | OFF(L) | * | OFF(L) | * | OFF(L) | * | * | * | * | * |

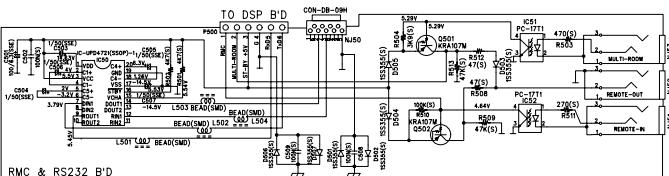
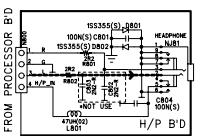
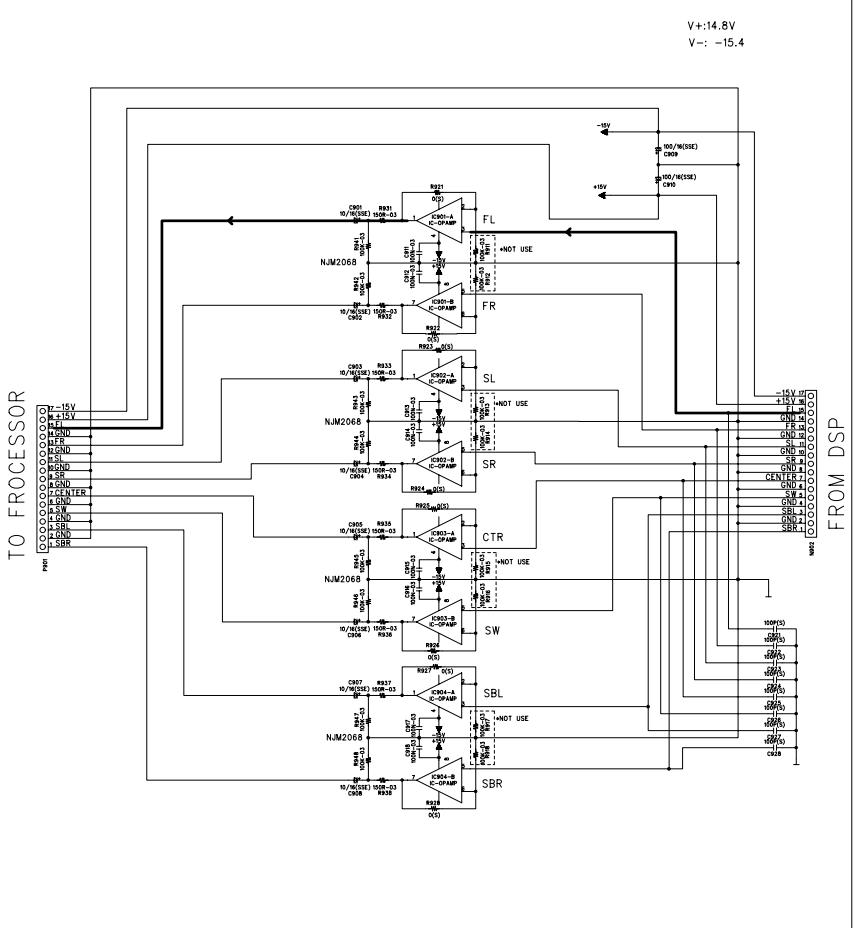
119

| | | | |
|------------------|-------|-------------------|--|
| COMPANY: | | | |
| TITLE: | | | |
| DRAWN: | DATE: | | |
| CHECKED: | DATE: | | |
| QUALITY CONTROL: | DATE: | | |
| RELEASED: | DATE: | | |
| STAGE/AMS | | DRAWING NO.: REV: | |

TOTAL SHEET:

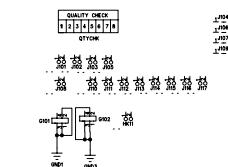
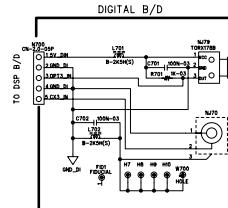
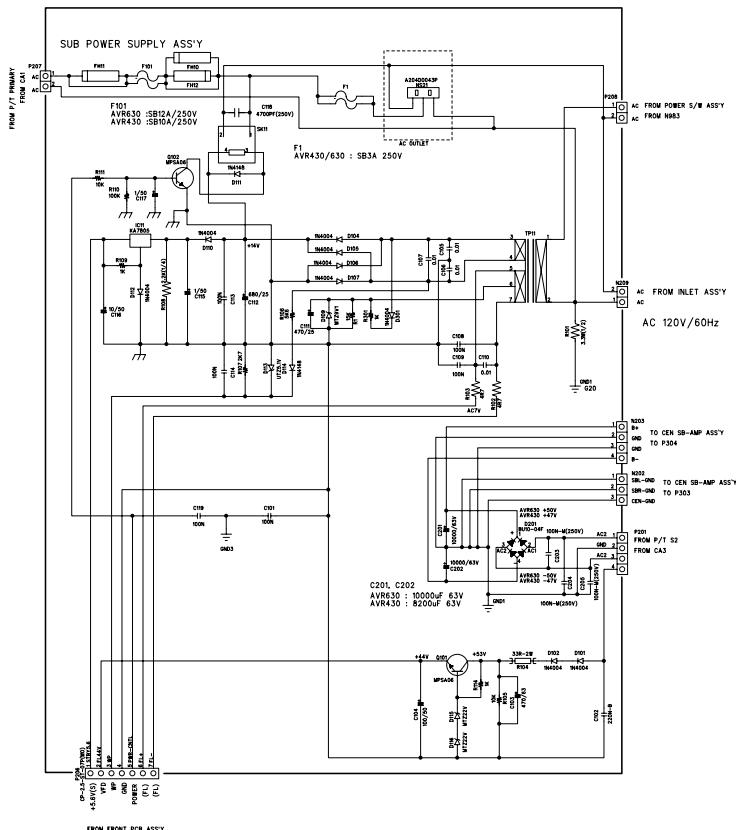
| REVISION RECORD | | | |
|-----------------|---------|----------|------|
| REV | ECO NO. | APPROVED | DATE |
| | | | |
| | | | |
| | | | |

8CH-DIRECT CNT B'D



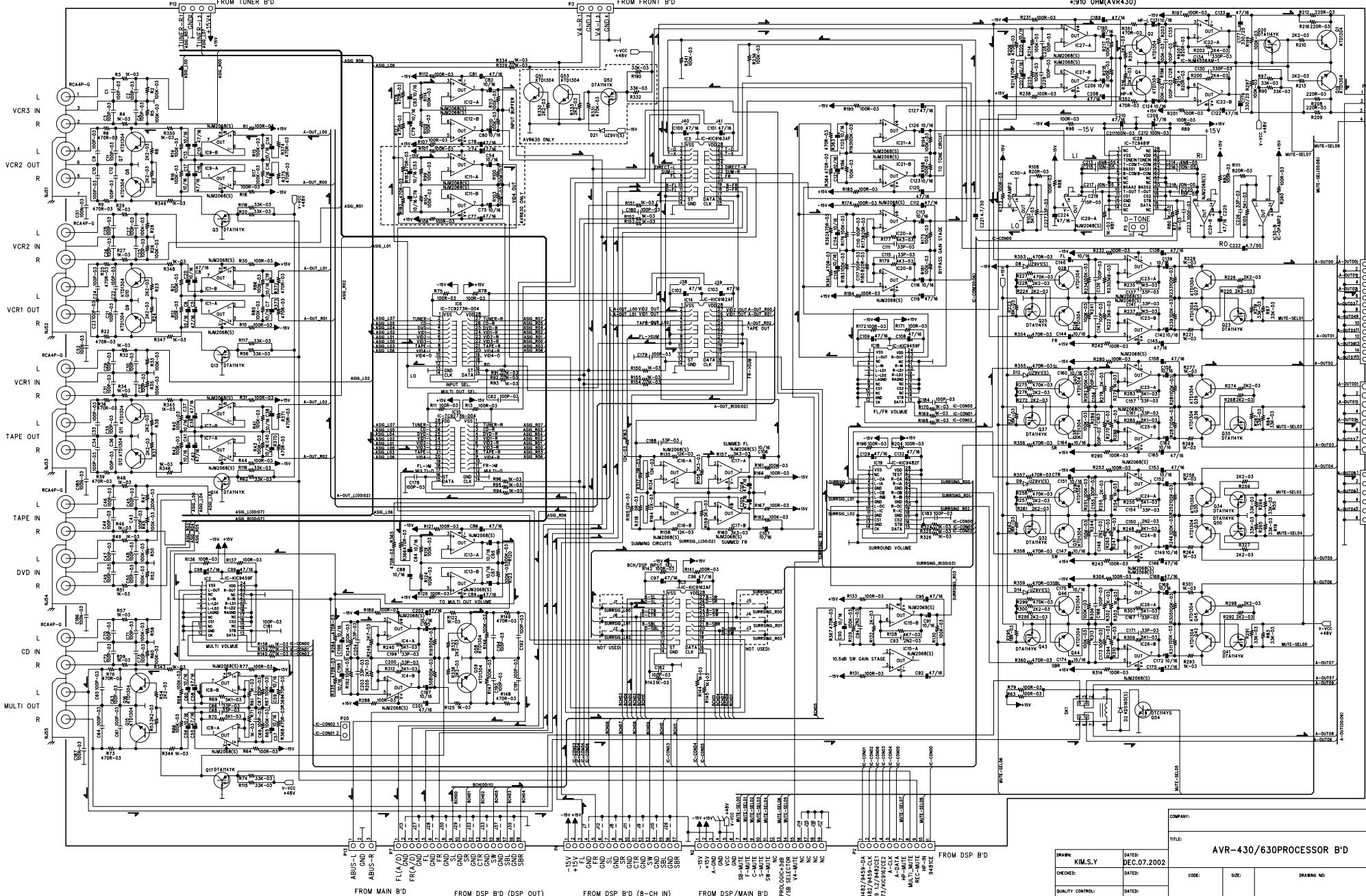
| | |
|------------------|----------------|
| DRAWN: | DATED: |
| CHECKED: | DATED: |
| QUALITY CONTROL: | DATED: |
| RELEASED: | DATED: |
| STAGE: TWS | SHEET: 5 OF 10 |

AVR 630/430 ST-BY SCHEMATIC DIAGRAM



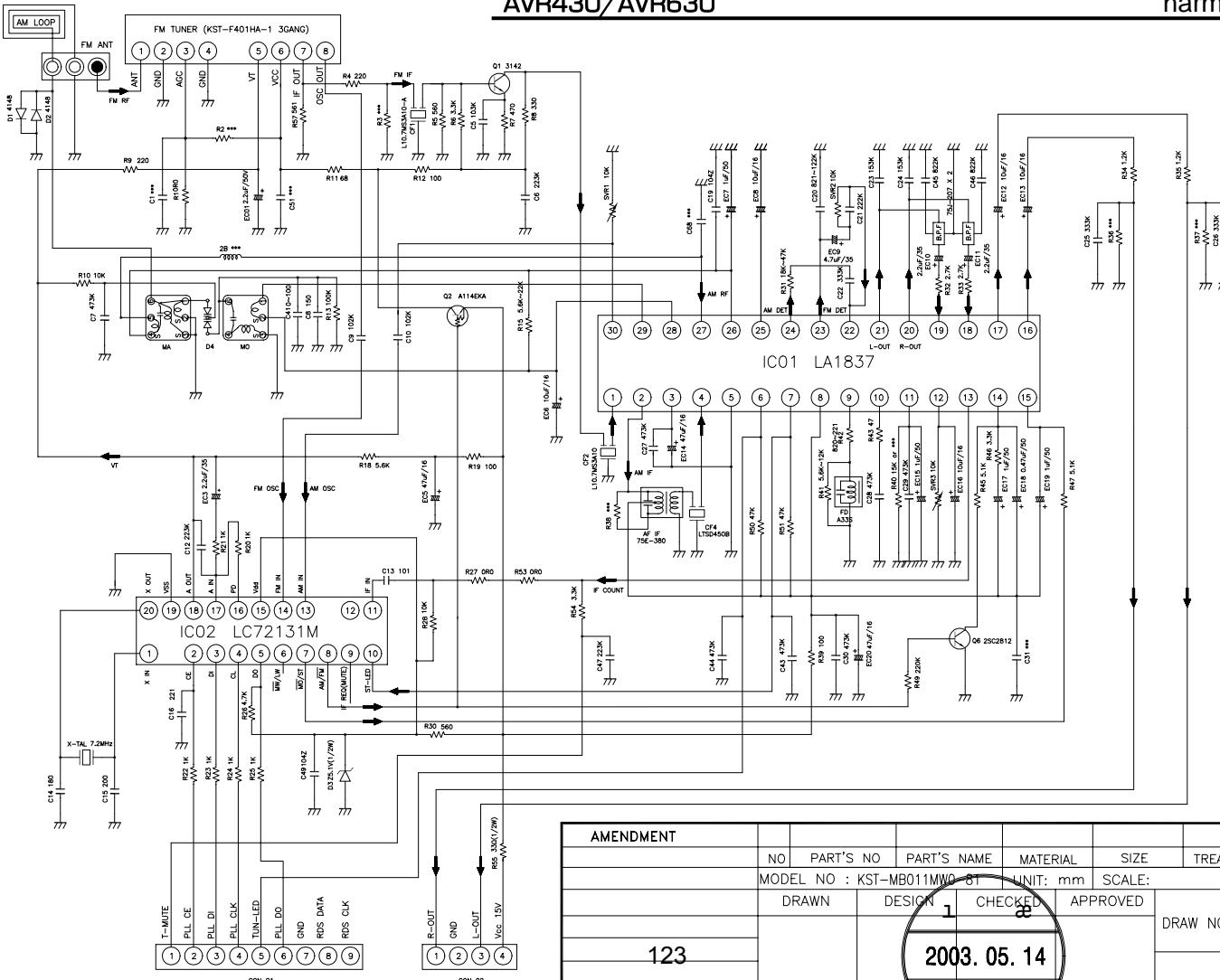
| REVISION RECORD | | | |
|-----------------|---------|-----------|-------|
| LTR | ECO NO: | APPROVED: | DATE: |

SCHEMATIC DIAGRAM AVR430/630



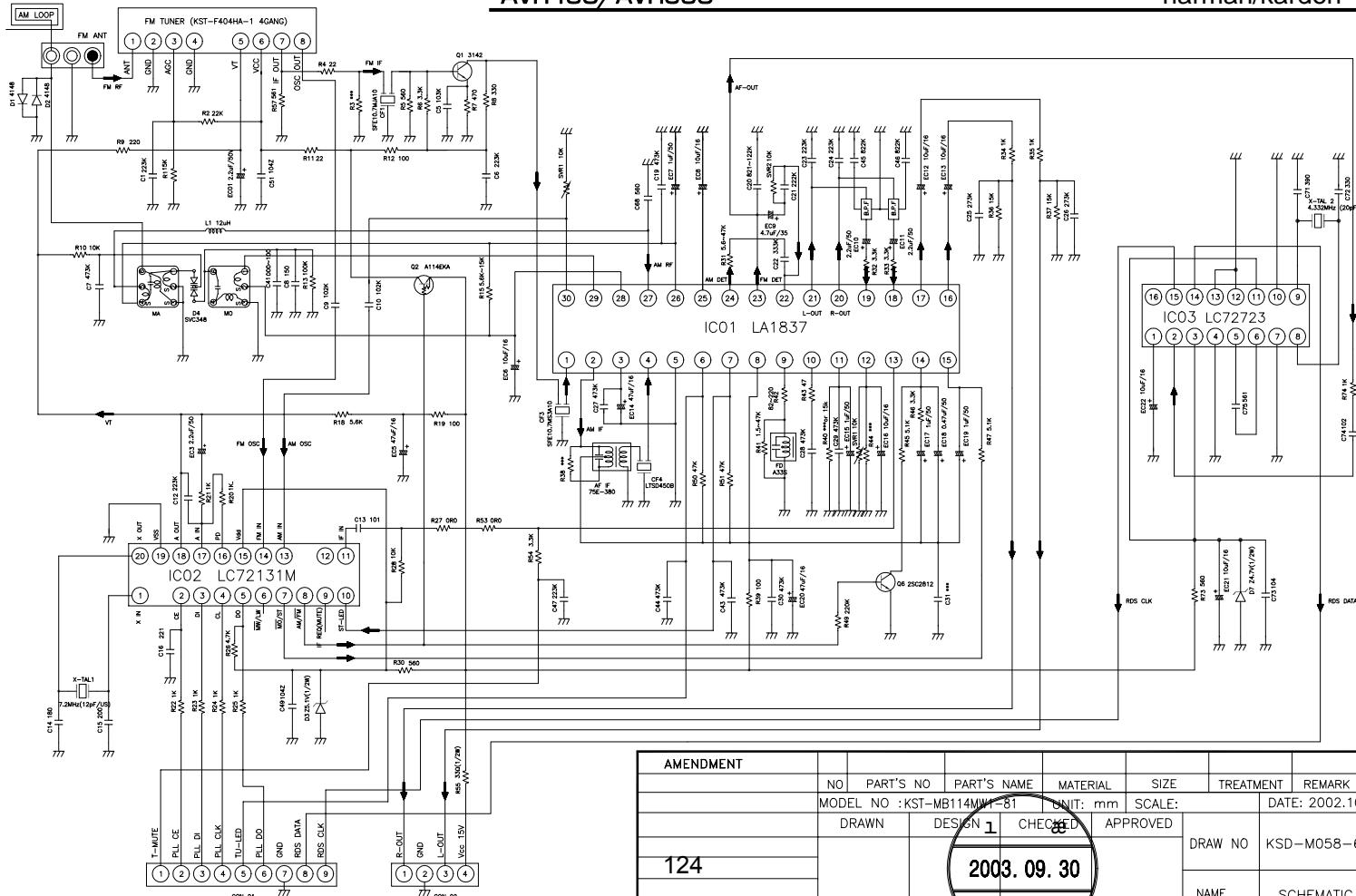
COMPANY:
TITLE: AVR-430/630PROCESSOR B'D
DRAWN: KIM.S.Y DATE: DEC.07.2002

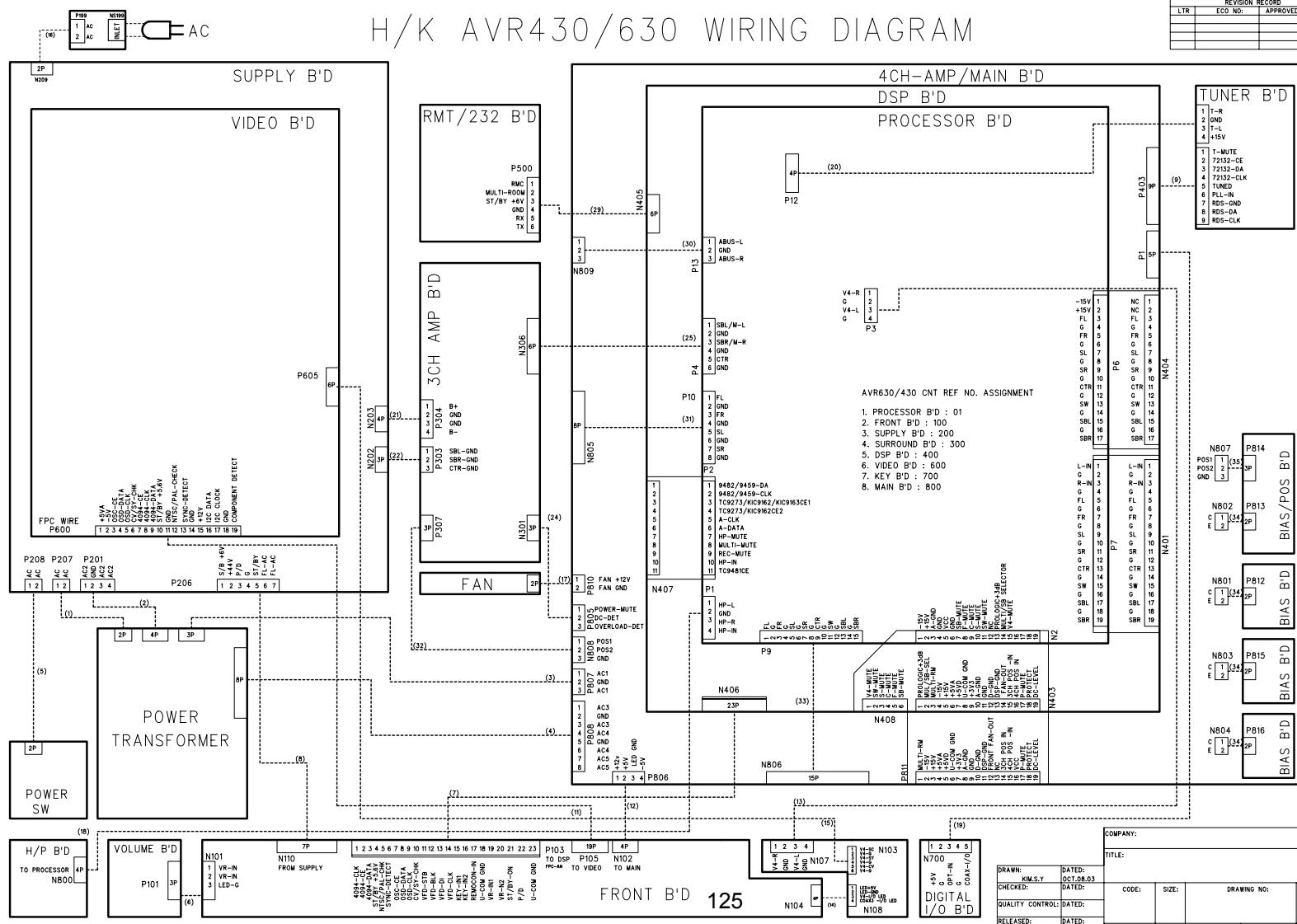
CHECKED: DATE: CODE: SIZE: DRAWING NO: REV:
QUALITY CONTROL: DATE: RELEASED: DATE: SCALE: SHEET: OF



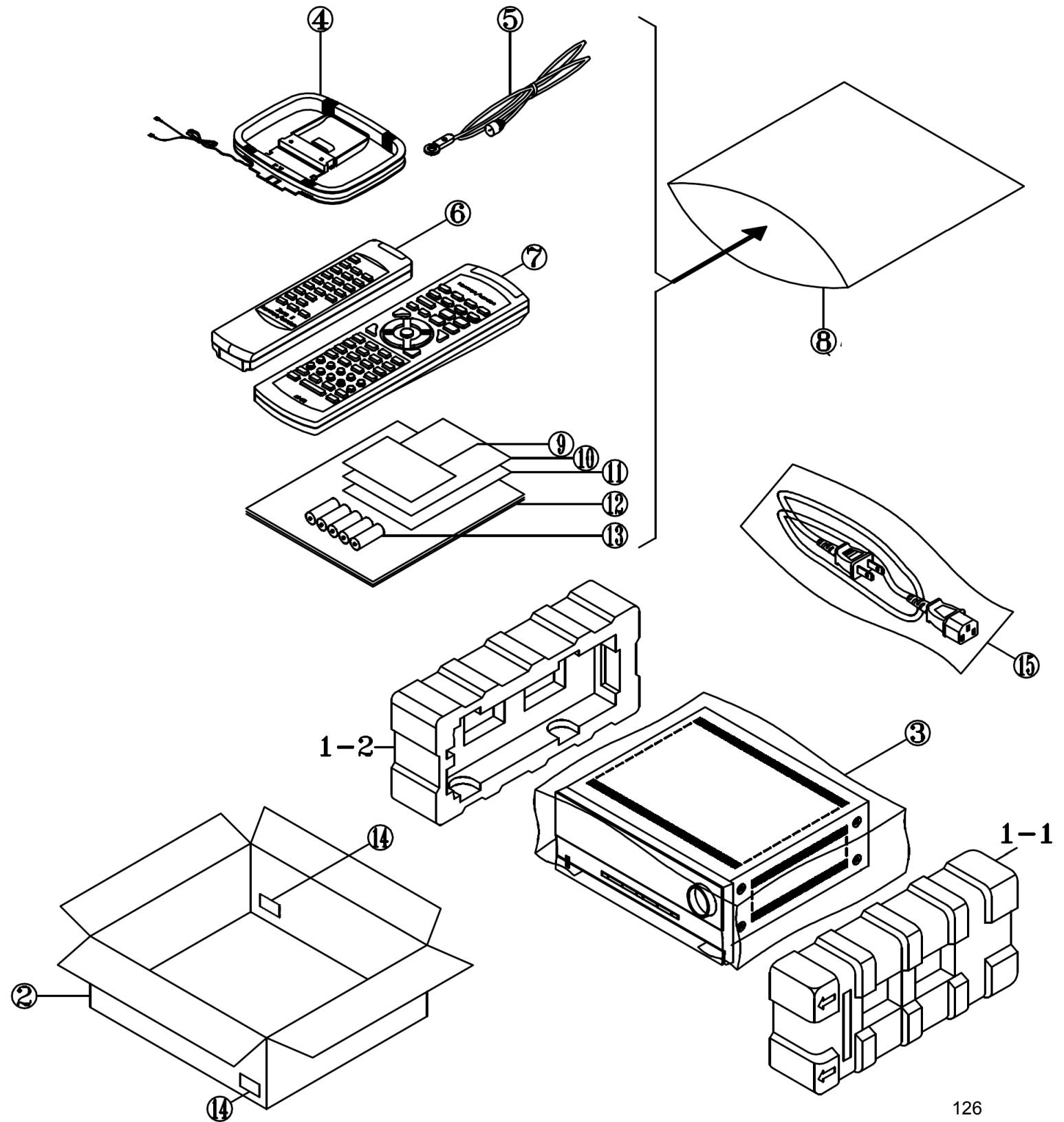
AVR430/AVR630

harman/kardon





AVR430-630 PACKAGING



| Ref# | Part Number | Description | AVR430 120v | AVR630 120v | AVR430 230v | AVR630 230v |
|------|-------------------|-------------------------|----------------|----------------|----------------|----------------|
| 1-1 | ZQC1101HAWH-2 | Right Foam End | X | X | X | X |
| 1-2 | ZQC1102HAWH-9 | Left Foam End | X | X | X | X |
| 2 | ZKC1004HA00-5 | Outer Carton 430-120v | X | | | |
| | ZKC1104HA00-A | Outer Carton 630-120v | | X | | |
| | ZKD0104HA00-9 | Outer Carton 430-230v | | | X | |
| | ZKD0204HA00-3 | Outer Carton 630-230v | | | | X |
| 3 | | Plastic Bag | X | X | X | X |
| 4 | H01-ATALF039ABK-A | AM Antenna Loop | X | X | X | X |
| 5 | H01-WAB01200203-9 | FM Antenna 120v | X | X | | |
| | H01-WAD01200303-3 | FM Antenna 230v | | | X | X |
| 6 | H01-RYC1202HA00-5 | Zone II Remote Control | X | X | X | X |
| 7 | BE18A03 | Remote Control 430-120v | X | | | |
| | BE18A04 | Remote Control 630-120v | | X | | |
| | H01-RYD0101HA00-8 | Remote Control 430-230v | | | X | |
| | H01-RYD0201HA00-6 | Remote Control 630-230v | | | | X |
| 8 | | Plastic Bag | X | X | X | X |
| 9 | | Misc. card | X | X | X | X |
| 10 | ZKC1113HA00-9 | Warranty Card | X | X | X | X |
| 11 | | Safety Paper | X | X | X | X |
| 12 | ZKC1001HB00-6 | Owner's Manual 430-120v | X | | | |
| | ZKC1101HA00-0 | Owner's Manual 630-120v | | X | | |
| | ZKD0101HA00-A | Owner's Manual 430-230v | | | X | |
| | ZKD0201HA00-4 | Owner's Manual 630-230v | | | | X |
| 13 | | 1.5v AA Batteries | X | X | X | X |
| 14 | | Label-Barcode 430-120v | X | | | |
| | | Label-Barcode 630-120v | | X | | |
| | | Label-Barcode 430-230v | | | X | |
| | | Label-Barcode 630-230v | | | | X |
| 15 | H01-WAUSA2103BK-1 | Power Cord - 120v | X | X | | |
| | H01-WAD022000BK-2 | Power Cord - 230v | | | X | X |